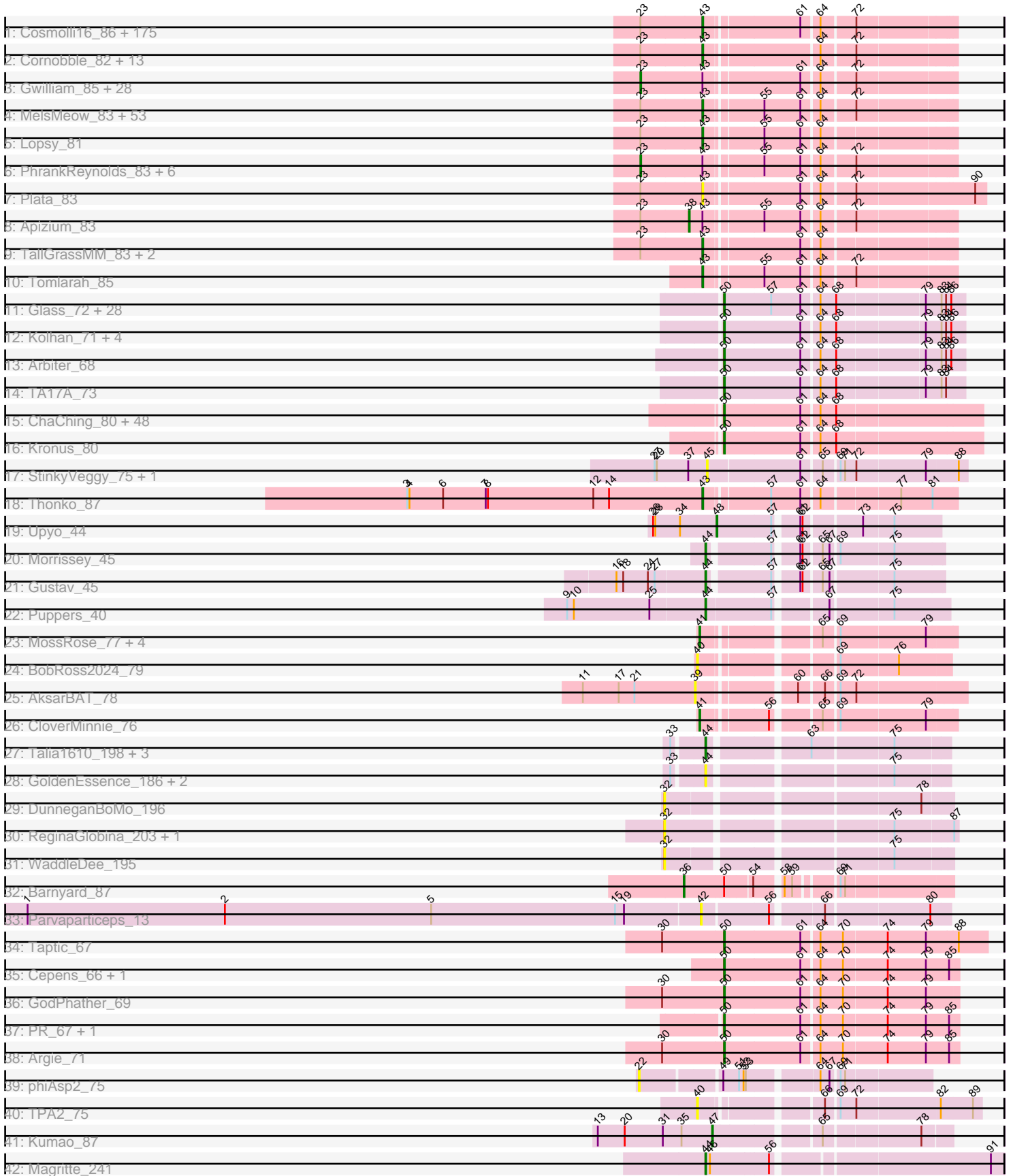


Pham 224171



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 224171 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224171 has 412 members, 51 are drafts.

Phages represented in each track:

- Track 1 : Cosmolli16_86, HenryJackson_85, Pinkman_84, Squiggle_83, AngelCake_81, YouGoGlencoco_84, Scrick_83, Carthage_85, Mcshane_83, Podrick_83, Yoshand_85, Cannibal_85, SDcharge11_83, Etaye_83, HSavage_82, MitKao_84, Boehler_83, Thunderbird_84, Zaider_85, TomBombadil_84, JDog_83, Vaishali24_85, Squid_83, Khan1_84, Gareth_84, Plmatters_82, Sheila_80, Roscoe_84, Hamish_81, JakeO_85, Melc17_81, LostAndPhound_83, Schadenfreude_84, Vaticameos_81, Thora_83, Cornbread_84, Freya_81, KingTut_75, Mutante_85, Kimbrough_85, DelRivs_82, ThreeOh3D2_86, Windsor_84, Phareon_82, Serpentine_0085, Cobra_84, Maru_84, Rimu_88, PhatLouie_86, IsaacEli_86, Lumine_85, Placalicious_83, Oline_83, Chorkpop_85, Dingo_81, Slatt_84, Labeouficaum_84, Roliet_81, Frankicide_83, Quisquilliae_86, Selr12_85, Cher_84, Buckeye_84, Adriana_84, Orwigg_83, Virapocalypse_85, Ricotta_84, Usavi_85, Pipsqueak_81, Swiphy_88, Chipette_83, Nyala_83, Horchata_81, Nathan_85, Mana_82, Magic8_83, Gyarad_0083, Gophee_84, Duggie_84, JangoPhett_82, UAch1_85, Swish_85, LeiMonet_86, DoesntMatter_81, Timmi_83, Virgeve_82, Wallhey_85, TyrionL_84, Phipps_83, Numberten_83, Hocus_82, Durga_86, Andre_86, Struggle_84, OliverWalter_84, ShiVal_82, Daffy_83, Phamished_84, Orfeu_83, Robyn_86, Soto_81, PhrodoBaggins_86, Spartan300_83, Mecca_84, Manad_83, Waterdiva_85, Fringe_88, AltPhacts_82, Grand2040_82, Bluephacebaby_83, TooFast2Furius_86, Mesmerelda_85, KlimbOn_83, Piglet_0084, Morty_85, Scoot17C_85, Oosterbaan_84, Pacifista_83, BlueHusk_85, Dati_81, Jillium_85, Potter_80, ProfessorX_82, Jesabah_83, CampRoach_85, Lulwa_81, Emiris_86, Charles1_85, Weher20_81, SassyCat97_82, Anderson_86, Harvey_81, Kikipoo_86, Olive_82, Held_82, Childish_84, Inverness_82, RedMaple_84, Matalotodo_83, Badfish_85, Hetaeria_84, LuckyMarjie_81, Basato_83, DaddyDaniels_87, Surely_84, GeneCoco_85, Haimas_82, DirtJuice_84, Zelda_84, Burr_84, Fozzie_82, KLucky39_82, ABU_83, MiniBoss_81, Soile_85, Skippy_85, MRabcd_84, MrPhizzler_83, Iridessa_88, HighStump_85, Kahve_85, Mulan_83, Eugenia_86, True_82, AbsoluteMadLad_83, Dice_83, Valjean_83, Riverton_83, KingVeVeVe_82, Simielle_83, ElvisPhasley_90, Craff_86, Kloppinator_84, Jiraiya_85, Mikota_81, Brilliant_87
- Track 2 : Cornobble_82, Olak_83, OSmaximus_85, Bishoperium_84, Sophia_82, Haleema_83, Altwerkus_82, LemonSlice_84, Phunky_82, PinheadLarry_83, Prickles_85, Lasso_83, Daka_86, Colbert_82
- Track 3 : Gwilliam_85, Toni_84, FriarPreacher_82, Suffolk_81, CheetO_81, Nacho_0087, Mosaic_82, PG1_83, Vortex_83, Orion_83, Murdoc_81, Chunky_84, Derpp_84, Pops_82, Eremos_83, Puhltonio_81, Trypo_85, Zonia_85, Newman_82,

Roy17_82, Serendipity_84, Lulumae_81, UncleHowie_81, Xavier_84, LeeLot_83, Gwennie1_81, Hertubise_84, Morgushi_82, Mesh1_85

- Track 4 : MelsMeow_83, Dione_82, Vivaldi_84, Iridoclysis_83, PhenghisKhan_84, Chute_84, Giraffe_84, QueenBeane_84, Megatron_85, BatteryCK_82, Omniscient_85, Lego3393_82, Pherdinand_85, BlackStallion_83, Phleuron_82, EmpTee_83, Longacauda_85, Nicole21_85, Coletti_86, DonSanchon_80, Legolas_85, Megamind20_84, Veritas_83, Antonia_83, LasagnaCat_85, Katniss_86, Schueller_82, Phergie_84, FluffyNinja_85, JacAttac_84, Kwksand96_85, Mag7_82, Beaglebox_81, Samaymay_84, Kwadwo_83, Tooj_81, FugateOSU_84, Chaelin_85, Keitherie_87, CamL_84, ImtiyazSitla_85, Ashraf_85, Telesworld_82, Aelin_83, Vista_83, Banjo_81, SirBeauregard_85, CharlieGBrown_82, Maskar_85, Inchworm_85, Jiminy_84, MichaelPhcott_82, Kailash_82, Riggan_85
- Track 5 : Lopsy_81
- Track 6 : PhrankReynolds_83, SilverBell_85, Doddsville_82, Hartsy_83, DuchessDung_82, Sigman_84, PhatCats2014_84
- Track 7 : Plata_83
- Track 8 : Apizium_83
- Track 9 : TallGrassMM_83, Solosis_82, Caspiboi_85
- Track 10 : Tomlarah_85
- Track 11 : Glass_72, Vic9_00070, Hedgerow_70, Tres_70, Godines_71, Lars_71, Brownie5_70, Opia_71, PrinceCharming_71, Allegro_70, Kheth_70, Eaglehorse_70, Boyle_70, LizLemon_70, Rosebush_69, LilSmirk_70, Blocker23_70, Bananafish_71, MasterPo_71, FrenchFry_71, Calamitous_71, Holeinone_70, ItsyBitsy1_69, Coffee_70, Tinciduntolum_71, Lephleur_70, Rhinoforte_70, Kaleb_71, West99_70
- Track 12 : Kolhan_71, Phantasmagoria_69, Sabella_70, Faze9_69, Ares_70
- Track 13 : Arbiter_68
- Track 14 : TA17A_73
- Track 15 : ChaChing_80, Athena_82, Tydolla_76, GlenHope_81, Phaedrus_75, Chentzyk_82, Casbah_80, Pipefish_82, HarveySr_79, Neos5_80, LestyG_78, Nozo_80, Jackstina_75, Heathcliff_80, Akoma_80, Yahalom_78, Phayeta_83, MmasiCarm_81, Gadjet_81, Deenasa_80, Yinz_80, Audrey_80, SynergyX_80, Daisy_79, Baloo_79, Rita1961_81, Mortcellus_80, Shenandoah_79, Kamiyu_80, RagingRooster_79, Glubnar_80, Bernardo_81, Marlia_81, TinyTerror_81, Corofin_80, Marley1013_81, Phlyer_80, Philly_79, Chalmers_79, Chandler_80, SlippinJimmy_83, Briakila_80, Halfpint_79, Abinghost_80, Obutu_82, Morty007_79, SwainyDoc_81, RomaT_80, Gervas_81
- Track 16 : Kronus_80
- Track 17 : StinkyVeggy_75, KarasumaRum_75
- Track 18 : Thonko_87
- Track 19 : Upyo_44
- Track 20 : Morrissey_45
- Track 21 : Gustav_45
- Track 22 : Puppies_40
- Track 23 : MossRose_77, AnarQue_79, Yeshua_79, CaiB_78, MakoManhole_74
- Track 24 : BobRoss2024_79
- Track 25 : AksarBAT_78
- Track 26 : CloverMinnie_76
- Track 27 : Talia1610_198, Bloom_201, Racecar_198, Mimi_197
- Track 28 : GoldenEssence_186, Phrampa_191, Patbob_197
- Track 29 : DunneganBoMo_196
- Track 30 : ReginaGlobina_203, LeoJr_199
- Track 31 : WaddleDee_195
- Track 32 : Barnyard_87

- Track 33 : Parvarticeps_13
- Track 34 : Taptic_67
- Track 35 : Cepens_66, Megabear_66
- Track 36 : GodPhather_69
- Track 37 : PR_67, D12_66
- Track 38 : Argie_71
- Track 39 : phiAsp2_75
- Track 40 : TPA2_75
- Track 41 : Kumao_87
- Track 42 : Magritte_241

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 43, it was called in 230 of the 361 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_83, AbsoluteMadLad_83, Adriana_84, Aelin_83, AltPhacts_82, Altwerkus_82, Anderson_86, Andre_86, AngelCake_81, Antonia_83, Ashraf_85, Badfish_85, Banjo_81, Basato_83, BatteryCK_82, Beaglebox_81, Bishoperium_84, BlackStallion_83, BlueHusk_85, Bluephacebaby_83, Boehler_83, Brilliant_87, Buckeye_84, Burr_84, CamL_84, CampRoach_85, Cannibal_85, Carthage_85, Caspiboi_85, Chaelin_85, Charles1_85, CharlieGBrown_82, Cher_84, Childish_84, Chipette_83, Chorkpop_85, Chute_84, Cobra_84, Colbert_82, Coletti_86, Cornbread_84, Cornobble_82, Cosmolli16_86, Craff_86, DaddyDaniels_87, Daffy_83, Daka_86, Dati_81, DelRivs_82, Dice_83, Dingo_81, Dione_82, DirtJuice_84, DoesntMatter_81, DonSanchon_80, Duggie_84, Durga_86, ElvisPhasley_90, Emiris_86, EmpTee_83, Etaye_83, Eugenia_86, FluffyNinja_85, Fozzie_82, Frankicide_83, Freya_81, Fringe_88, FugateOSU_84, Gareth_84, GeneCoco_85, Giraffe_84, Gophee_84, Grand2040_82, Gyarad_0083, HSavage_82, Haimas_82, Haleema_83, Hamish_81, Harvey_81, Held_82, HenryJackson_85, Hetaeria_84, HighStump_85, Hocus_82, Horchata_81, ImtiyazSitla_85, Inchworm_85, Inverness_82, Iridessa_88, Iridoclysis_83, IsaacEli_86, JDog_83, JacAttac_84, JakeO_85, JangoPhett_82, Jesabah_83, Jillium_85, Jiminy_84, Jiraiya_85, KLucky39_82, Kahve_85, Kailash_82, Katniss_86, Keitherie_87, Khan1_84, Kikipoo_86, Kimbrough_85, KingTut_75, KingVeVeVe_82, KlimbOn_83, Kloppinator_84, Kwadwo_83, Kwksand96_85, Labeouficaum_84, LasagnaCat_85, Lasso_83, Lego3393_82, Legolas_85, LeiMonet_86, LemonSlice_84, Longacauda_85, Lopsy_81, LostAndPhound_83, LuckyMarjie_81, Lulwa_81, Lumine_85, MRabcd_84, Mag7_82, Magic8_83, Mana_82, Manad_83, Maru_84, Maskar_85, Matalotodo_83, Mcshane_83, Mecca_84, Megamind20_84, Megatron_85, Melc17_81, MelsMeow_83, Mesmerelda_85, MichaelPhcott_82, Mikota_81, MiniBoss_81, MitKao_84, Morty_85, MrPhizzler_83, Mulan_83, Mutante_85, Nathan_85, Nicole21_85, Numberten_83, Nyala_83, OSmaximus_85, Olak_83, Oline_83, Olive_82, OliverWalter_84, Omniscient_85, Oosterbaan_84, Orfeu_83, Orwigg_83, Pacifista_83, Phamished_84, Phareon_82, PhatLouie_86, PhenghisKhan_84, Pherdinand_85, Phergie_84, Phipps_83, Phleuron_82, PhrodoBaggins_86, Phunky_82, Piglet_0084, PinheadLarry_83, Pinkman_84, Pipsqueak_81, Placalicious_83, Plata_83, Plmatters_82, Podrick_83, Potter_80, Prickles_85, ProfessorX_82, QueenBeane_84, Quisquilliae_86, RedMaple_84,

Ricotta_84, Riggan_85, Rimu_88, Riverton_83, Robyn_86, Roliet_81, Roscoe_84, SDcharge11_83, Samaymay_84, SassyCat97_82, Schadenfreude_84, Schueller_82, Scoot17C_85, Scrick_83, Selr12_85, Serpentine_0085, Sheila_80, ShiVal_82, Simielle_83, SirBeauregard_85, Skippy_85, Slatt_84, Soile_85, Solosis_82, Sophia_82, Soto_81, Spartan300_83, Squid_83, Squiggle_83, Struggle_84, Surely_84, Swiphy_88, Swish_85, TallGrassMM_83, Telesworld_82, Thonko_87, Thora_83, ThreeOh3D2_86, Thunderbird_84, Timmi_83, TomBombadil_84, Tomlarah_85, TooFast2Furius_86, Tooj_81, True_82, TyrionL_84, UAch1_85, Usavi_85, Vaishali24_85, Valjean_83, Vaticameos_81, Veritas_83, Virapocalypse_85, Virgeve_82, Vista_83, Vivaldi_84, Wallhey_85, Waterdiva_85, Weher20_81, Windsor_84, Yoshand_85, YouGoGlencoco_84, Zaider_85, Zelda_84,

Genes that have the "Most Annotated" start but do not call it:

- Apizium_83, CheetO_81, Chunky_84, Derpp_84, Doddsville_82, DuchessDung_82, Eremos_83, FriarPreacher_82, Gwennie1_81, Gwilliam_85, Hartsy_83, Hertubise_84, LeeLot_83, Lulumae_81, Mesh1_85, Morgushi_82, Mosaic_82, Murdoc_81, Nacho_0087, Newman_82, Orion_83, PG1_83, PhatCats2014_84, PhrankReynolds_83, Pops_82, Puhltonio_81, Roy17_82, Serendipity_84, Sigman_84, SilverBell_85, Suffolk_81, Toni_84, Trypo_85, UncleHowie_81, Vortex_83, Xavier_84, Zonia_85,

Genes that do not have the "Most Annotated" start:

- Abinghost_80, Akoma_80, AksarBAT_78, Allegro_70, AnarQue_79, Arbiter_68, Ares_70, Argie_71, Athena_82, Audrey_80, Baloo_79, Bananafish_71, Barnyard_87, Bernardo_81, Blocker23_70, Bloom_201, BobRoss2024_79, Boyle_70, Briakila_80, Brownie5_70, CaiB_78, Calamitous_71, Casbah_80, Cepens_66, ChaChing_80, Chalmers_79, Chandler_80, Chentzyk_82, CloverMinnie_76, Coffee_70, Corofin_80, D12_66, Daisy_79, Deenasa_80, DunneganBoMo_196, Eaglehorse_70, Faze9_69, FrenchFry_71, Gadjet_81, Gervas_81, Glass_72, GlenHope_81, Glubnar_80, GodPhather_69, Godines_71, GoldenEssence_186, Gustav_45, Halfpint_79, HarveySr_79, Heathcliff_80, Hedgerow_70, Holeinone_70, ItsyBitsy1_69, Jackstina_75, Kaleb_71, Kamiyu_80, KarasumaRum_75, Kheth_70, Kolhan_71, Kronus_80, Kumao_87, Lars_71, LeoJr_199, Lephleur_70, LestyG_78, LilSmirk_70, LizLemon_70, Magritte_241, MakoManhole_74, Marley1013_81, Marlia_81, MasterPo_71, Megabear_66, Mimi_197, MmasiCarm_81, Morrissey_45, Mortcellus_80, Morty007_79, MossRose_77, Neos5_80, Nozo_80, Obutu_82, Opia_71, PR_67, Parvapaticeps_13, Patbob_197, Phaedrus_75, Phantasmagoria_69, Phayeta_83, Philly_79, Phlyer_80, Phrampa_191, Pipefish_82, PrinceCharming_71, Puppets_40, Racecar_198, RagingRooster_79, ReginaGlobina_203, Rhinoforte_70, Rita1961_81, RomaT_80, Rosebush_69, Sabella_70, Shenandoah_79, SlippinJimmy_83, StinkyVeggy_75, SwainyDoc_81, SynergyX_80, TA17A_73, TPA2_75, Talia1610_198, Taptic_67, Tinciduntolum_71, TinyTerror_81, Tres_70, Tydolla_76, Upyo_44, Vic9_00070, WaddleDee_195, West99_70, Yahalom_78, Yeshua_79, Yinz_80, phiAsp2_75,

Summary by start number:

Start 22:

- Found in 1 of 412 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiAsp2_75 (singleton),

Start 23:

- Found in 286 of 412 (69.4%) of genes in pham
- Manual Annotations of this start: 34 of 361
- Called 12.6% of time when present
- Phage (with cluster) where this start called: CheetO_81 (B1), Chunky_84 (B1), Derpp_84 (B1), Doddsville_82 (B1), DuchessDung_82 (B1), Eremos_83 (B1), FriarPreacher_82 (B1), Gwennie1_81 (B1), Gwilliam_85 (B1), Hartsy_83 (B1), Hertubise_84 (B1), LeeLot_83 (B1), Lulumae_81 (B1), Mesh1_85 (B1), Morgushi_82 (B1), Mosaic_82 (B1), Murdoc_81 (B1), Nacho_0087 (B1), Newman_82 (B1), Orion_83 (B1), PG1_83 (B1), PhatCats2014_84 (B1), PhrankReynolds_83 (B1), Pops_82 (B1), Puhltonio_81 (B1), Roy17_82 (B1), Serendipity_84 (B1), Sigman_84 (B1), SilverBell_85 (B1), Suffolk_81 (B1), Toni_84 (B1), Trypo_85 (B1), UncleHowie_81 (B1), Vortex_83 (B1), Xavier_84 (B1), Zonia_85 (B1),

Start 32:

- Found in 4 of 412 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DunneganBoMo_196 (FC), LeoJr_199 (FC), ReginaGlobina_203 (FC), WaddleDee_195 (FC),

Start 36:

- Found in 1 of 412 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnyard_87 (H2),

Start 38:

- Found in 1 of 412 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apizium_83 (B1),

Start 39:

- Found in 1 of 412 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AksarBAT_78 (DR),

Start 40:

- Found in 2 of 412 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024_79 (DR), TPA2_75 (singleton),

Start 41:

- Found in 6 of 412 (1.5%) of genes in pham
- Manual Annotations of this start: 5 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_79 (DR), CaiB_78 (DR), CloverMinnie_76 (DR), MakoManhole_74 (DR), MossRose_77 (DR), Yeshua_79 (DR),

Start 42:

- Found in 1 of 412 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Parvavarticeps_13 (UNK),

Start 43:

- Found in 288 of 412 (69.9%) of genes in pham
- Manual Annotations of this start: 230 of 361
- Called 87.2% of time when present
- Phage (with cluster) where this start called: ABU_83 (B1), AbsoluteMadLad_83 (B1), Adriana_84 (B1), Aelin_83 (B1), AltPhacts_82 (B1), Altwerkus_82 (B1), Anderson_86 (B1), Andre_86 (B1), AngelCake_81 (B1), Antonia_83 (B1), Ashraf_85 (B1), Badfish_85 (B1), Banjo_81 (B1), Basato_83 (B1), BatteryCK_82 (B1), Beaglebox_81 (B1), Bishoperium_84 (B1), BlackStallion_83 (B1), BlueHusk_85 (B1), Bluephacebaby_83 (B1), Boehler_83 (B1), Brilliant_87 (B1), Buckeye_84 (B1), Burr_84 (B1), CamL_84 (B1), CampRoach_85 (B1), Cannibal_85 (B1), Carthage_85 (B1), Caspiboi_85 (B1), Chaelin_85 (B1), Charles1_85 (B1), CharlieGBrown_82 (B1), Cher_84 (B1), Childish_84 (B1), Chipette_83 (B1), Chorkpop_85 (B1), Chute_84 (B1), Cobra_84 (B1), Colbert_82 (B1), Coletti_86 (B1), Cornbread_84 (B1), Cornobble_82 (B1), Cosmolli16_86 (B1), Craff_86 (B1), DaddyDaniels_87 (B1), Daffy_83 (B1), Daka_86 (B1), Dati_81 (B1), DelRivs_82 (B1), Dice_83 (B1), Dingo_81 (B1), Dione_82 (B1), DirtJuice_84 (B1), DoesntMatter_81 (B1), DonSanchon_80 (B1), Duggie_84 (B1), Durga_86 (B1), ElvisPhasley_90 (B1), Emiris_86 (B1), EmpTee_83 (B1), Etaye_83 (B1), Eugenia_86 (B1), FluffyNinja_85 (B1), Fozzie_82 (B1), Frankicide_83 (B1), Freya_81 (B1), Fringe_88 (B1), FugateOSU_84 (B1), Gareth_84 (B1), GeneCoco_85 (B1), Giraffe_84 (B1), Gophee_84 (B1), Grand2040_82 (B1), Gyarad_0083 (B1), HSavage_82 (B1), Haimas_82 (B1), Haleema_83 (B1), Hamish_81 (B1), Harvey_81 (B1), Held_82 (B1), HenryJackson_85 (B1), Hetaeria_84 (B1), HighStump_85 (B1), Hocus_82 (B1), Horchata_81 (B1), ImtiyazSitla_85 (B1), Inchworm_85 (B1), Inverness_82 (B1), Iridessa_88 (B1), Iridoclysis_83 (B1), IsaacEli_86 (B1), JDog_83 (B1), JacAttac_84 (B1), JakeO_85 (B1), JangoPhett_82 (B1), Jesabah_83 (B1), Jillium_85 (B1), Jiminy_84 (B1), Jiraiya_85 (B1), KLucky39_82 (B1), Kahve_85 (B1), Kailash_82 (B1), Katniss_86 (B1), Keitherie_87 (B1), Khan1_84 (B1), Kikipoo_86 (B1), Kimbrough_85 (B1), KingTut_75 (B1), KingVeVeVe_82 (B1), KlimbOn_83 (B1), Kloppinator_84 (B1), Kwadwo_83 (B1), Kwksand96_85 (B1), Labeouficaum_84 (B1), LasagnaCat_85 (B1), Lasso_83 (B1), Lego3393_82 (B1), Legolas_85 (B1), LeiMonet_86 (B1), LemonSlice_84 (B1), Longacauda_85 (B1), Lopsy_81 (B1), LostAndPhound_83 (B1), LuckyMarjie_81 (B1), Lulwa_81 (B1), Lumine_85 (B1), MRabcd_84 (B1), Mag7_82 (B1), Magic8_83 (B1), Mana_82 (B1), Manad_83 (B1), Maru_84 (B1), Maskar_85 (B1), Matalotodo_83 (B1), Mcshane_83 (B1), Mecca_84 (B1), Megamind20_84 (B1), Megatron_85 (B1), Melc17_81 (B1), MelsMeow_83 (B1), Mesmerelda_85 (B1), MichaelPhcott_82 (B1), Mikota_81 (B1), MiniBoss_81 (B1), MitKao_84 (B1), Morty_85 (B1), MrPhizzler_83 (B1), Mulan_83 (B1), Mutante_85 (B1), Nathan_85 (B1), Nicole21_85 (B1), Numberten_83 (B1), Nyala_83 (B1), OSmaximus_85 (B1), Olak_83 (B1), Oline_83 (B1), Olive_82 (B1), OliverWalter_84 (B1), Omniscient_85 (B1), Oosterbaan_84 (B1), Orfeu_83 (B1), Orwigg_83 (B1), Pacifista_83 (B1), Phamished_84 (B1), Phareon_82 (B1), PhatLouie_86 (B1), PhenghisKhan_84 (B1), Pherdinand_85 (B1), Phergie_84 (B1), Phipps_83 (B1), Phleuron_82 (B1), PhrodoBaggins_86 (B1), Phunky_82 (B1), Piglet_0084 (B1), PinheadLarry_83 (B1), Pinkman_84 (B1), Pipsqueak_81 (B1), Placalicious_83 (B1), Plata_83 (B1), Plmatters_82 (B1), Podrick_83 (B1), Potter_80

(B1), Prickles_85 (B1), ProfessorX_82 (B1), QueenBeane_84 (B1), Quisquilliae_86 (B1), RedMaple_84 (B1), Ricotta_84 (B1), Riggan_85 (B1), Rimu_88 (B1), Riverton_83 (B1), Robyn_86 (B1), Roliet_81 (B1), Roscoe_84 (B1), SDcharge11_83 (B1), Samaymay_84 (B1), SassyCat97_82 (B1), Schadenfreude_84 (B1), Schueller_82 (B1), Scoot17C_85 (B1), Scrick_83 (B1), Selr12_85 (B1), Serpentine_0085 (B1), Sheila_80 (B1), ShiVal_82 (B1), Simielle_83 (B1), SirBeauregard_85 (B1), Skippy_85 (B1), Slatt_84 (B1), Soile_85 (B1), Solosis_82 (B1), Sophia_82 (B1), Soto_81 (B1), Spartan300_83 (B1), Squid_83 (B1), Squiggle_83 (B1), Struggle_84 (B1), Surely_84 (B1), Swiphy_88 (B1), Swish_85 (B1), TallGrassMM_83 (B1), Telesworld_82 (B1), Thonko_87 (B8), Thora_83 (B1), ThreeOh3D2_86 (B1), Thunderbird_84 (B1), Timmi_83 (B1), TomBombadil_84 (B1), Tomlarah_85 (B1), TooFast2Furius_86 (B1), Tooj_81 (B1), True_82 (B1), TyrionL_84 (B1), UAch1_85 (B1), Usavi_85 (B1), Vaishali24_85 (B1), Valjean_83 (B1), Vaticameos_81 (B1), Veritas_83 (B1), Virapocalypse_85 (B1), Virgeve_82 (B1), Vista_83 (B1), Vivaldi_84 (B1), Wallhey_85 (B1), Waterdiva_85 (B1), Weher20_81 (B1), Windsor_84 (B1), Yoshand_85 (B1), YouGoGlencoco_84 (B1), Zaider_85 (B1), Zelda_84 (B1),

Start 44:

- Found in 11 of 412 (2.7%) of genes in pham
- Manual Annotations of this start: 7 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_201 (FC), GoldenEssence_186 (FC), Gustav_45 (CD), Magritte_241 (singleton), Mimi_197 (FC), Morrissey_45 (CD), Patbob_197 (FC), Phrampa_191 (FC), Puppies_40 (CD), Racecar_198 (FC), Talia1610_198 (FC),

Start 45:

- Found in 2 of 412 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KarasumaRum_75 (B5), StinkyVeggy_75 (B5),

Start 47:

- Found in 1 of 412 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_87 (singleton),

Start 48:

- Found in 1 of 412 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 361
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo_44 (CD),

Start 50:

- Found in 94 of 412 (22.8%) of genes in pham
- Manual Annotations of this start: 81 of 361
- Called 98.9% of time when present
- Phage (with cluster) where this start called: Abinghost_80 (B3), Akoma_80 (B3), Allegro_70 (B2), Arbiter_68 (B2), Ares_70 (B2), Argie_71 (W), Athena_82 (B3), Audrey_80 (B3), Baloo_79 (B3), Bananafish_71 (B2), Bernardo_81 (B3),

Blocker23_70 (B2), Boyle_70 (B2), Briakila_80 (B3), Brownie5_70 (B2), Calamitous_71 (B2), Casbah_80 (B3), Cepens_66 (W), ChaChing_80 (B3), Chalmers_79 (B3), Chandler_80 (B3), Chentzyk_82 (B3), Coffee_70 (B2), Corofin_80 (B3), D12_66 (W), Daisy_79 (B3), Deenasa_80 (B3), Eaglehorse_70 (B2), Faze9_69 (B2), FrenchFry_71 (B2), Gadget_81 (B3), Gervas_81 (B3), Glass_72 (B2), GlenHope_81 (B3), Glubnar_80 (B3), GodPhather_69 (W), Godines_71 (B2), Halfpint_79 (B3), HarveySr_79 (B3), Heathcliff_80 (B3), Hedgerow_70 (B2), Holeinone_70 (B2), ItsyBitsy1_69 (B2), Jackstina_75 (B3), Kaleb_71 (B2), Kamiyu_80 (B3), Kheth_70 (B2), Kolhan_71 (B2), Kronus_80 (B3), Lars_71 (B2), Lephleur_70 (B2), LestyG_78 (B3), LilSmirk_70 (B2), LizLemon_70 (B2), Marley1013_81 (B3), Marlia_81 (B3), MasterPo_71 (B2), Megabear_66 (W), MmasiCarm_81 (B3), Mortcellus_80 (B3), Morty007_79 (B3), Neos5_80 (B3), Nozo_80 (B3), Obutu_82 (B3), Opia_71 (B2), PR_67 (W), Phaedrus_75 (B3), Phantasmagoria_69 (B2), Phayeta_83 (B3), Philly_79 (B3), Phlyer_80 (B3), Pipefish_82 (B3), PrinceCharming_71 (B2), RagingRooster_79 (B3), Rhinoforte_70 (B2), Rita1961_81 (B3), RomaT_80 (B3), Rosebush_69 (B2), Sabella_70 (B2), Shenandoah_79 (B3), SlippinJimmy_83 (B3), SwainyDoc_81 (B3), SynergyX_80 (B3), TA17A_73 (B2), Taptic_67 (W), Tinciduntolum_71 (B2), TinyTerror_81 (B3), Tres_70 (B2), Tydolla_76 (B3), Vic9_00070 (B2), West99_70 (B2), Yahalom_78 (B3), Yinz_80 (B3),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, W, H2, B8, CD, B5, FC, B1, B2, B3, UNK, DR,

Info for manual annotations of cluster B1:

- Start number 23 was manually annotated 34 times for cluster B1.
- Start number 38 was manually annotated 1 time for cluster B1.
- Start number 43 was manually annotated 229 times for cluster B1.

Info for manual annotations of cluster B2:

- Start number 50 was manually annotated 32 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 50 was manually annotated 42 times for cluster B3.

Info for manual annotations of cluster B8:

- Start number 43 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster CD:

- Start number 44 was manually annotated 3 times for cluster CD.
- Start number 48 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DR:

- Start number 41 was manually annotated 5 times for cluster DR.

Info for manual annotations of cluster FC:

- Start number 44 was manually annotated 3 times for cluster FC.

Info for manual annotations of cluster H2:

- Start number 36 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster W:

•Start number 50 was manually annotated 7 times for cluster W.

Gene Information:

Gene: ABU_83 Start: 63381, Stop: 63079, Start Num: 43

Candidate Starts for ABU_83:

(Start: 23 @63462 has 34 MA's), (Start: 43 @63381 has 230 MA's), (61, 63264), (64, 63243), (72, 63204),

Gene: Abinghost_80 Start: 61235, Stop: 60906, Start Num: 50

Candidate Starts for Abinghost_80:

(Start: 50 @61235 has 81 MA's), (61, 61136), (64, 61115), (68, 61094),

Gene: AbsoluteMadLad_83 Start: 63335, Stop: 63033, Start Num: 43

Candidate Starts for AbsoluteMadLad_83:

(Start: 23 @63416 has 34 MA's), (Start: 43 @63335 has 230 MA's), (61, 63218), (64, 63197), (72, 63158),

Gene: Adriana_84 Start: 63897, Stop: 63595, Start Num: 43

Candidate Starts for Adriana_84:

(Start: 23 @63978 has 34 MA's), (Start: 43 @63897 has 230 MA's), (61, 63780), (64, 63759), (72, 63720),

Gene: Aelin_83 Start: 62839, Stop: 62537, Start Num: 43

Candidate Starts for Aelin_83:

(Start: 23 @62920 has 34 MA's), (Start: 43 @62839 has 230 MA's), (55, 62770), (61, 62722), (64, 62701), (72, 62662),

Gene: Akoma_80 Start: 61275, Stop: 60946, Start Num: 50

Candidate Starts for Akoma_80:

(Start: 50 @61275 has 81 MA's), (61, 61176), (64, 61155), (68, 61134),

Gene: AksarBAT_78 Start: 57238, Stop: 56921, Start Num: 39

Candidate Starts for AksarBAT_78:

(11, 57388), (17, 57340), (21, 57319), (39, 57238), (60, 57127), (66, 57097), (69, 57082), (72, 57061),

Gene: Allegro_70 Start: 59019, Stop: 58717, Start Num: 50

Candidate Starts for Allegro_70:

(Start: 50 @59019 has 81 MA's), (57, 58959), (61, 58920), (64, 58899), (68, 58878), (79, 58767), (83, 58746), (84, 58740), (86, 58734),

Gene: AltPhacts_82 Start: 62600, Stop: 62298, Start Num: 43

Candidate Starts for AltPhacts_82:

(Start: 23 @62681 has 34 MA's), (Start: 43 @62600 has 230 MA's), (61, 62483), (64, 62462), (72, 62423),

Gene: Altwerkus_82 Start: 62711, Stop: 62409, Start Num: 43

Candidate Starts for Altwerkus_82:

(Start: 23 @62792 has 34 MA's), (Start: 43 @62711 has 230 MA's), (64, 62573), (72, 62534),

Gene: AnarQue_79 Start: 58361, Stop: 58062, Start Num: 41
Candidate Starts for AnarQue_79:
(Start: 41 @58361 has 5 MA's), (65, 58229), (69, 58211), (79, 58100),

Gene: Anderson_86 Start: 63257, Stop: 62955, Start Num: 43
Candidate Starts for Anderson_86:
(Start: 23 @63338 has 34 MA's), (Start: 43 @63257 has 230 MA's), (61, 63140), (64, 63119), (72, 63080),

Gene: Andre_86 Start: 63279, Stop: 62977, Start Num: 43
Candidate Starts for Andre_86:
(Start: 23 @63360 has 34 MA's), (Start: 43 @63279 has 230 MA's), (61, 63162), (64, 63141), (72, 63102),

Gene: AngelCake_81 Start: 63006, Stop: 62704, Start Num: 43
Candidate Starts for AngelCake_81:
(Start: 23 @63087 has 34 MA's), (Start: 43 @63006 has 230 MA's), (61, 62889), (64, 62868), (72, 62829),

Gene: Antonia_83 Start: 62883, Stop: 62581, Start Num: 43
Candidate Starts for Antonia_83:
(Start: 23 @62964 has 34 MA's), (Start: 43 @62883 has 230 MA's), (55, 62814), (61, 62766), (64, 62745), (72, 62706),

Gene: Apizium_83 Start: 62557, Stop: 62237, Start Num: 38
Candidate Starts for Apizium_83:
(Start: 23 @62620 has 34 MA's), (Start: 38 @62557 has 1 MA's), (Start: 43 @62539 has 230 MA's), (55, 62470), (61, 62422), (64, 62401), (72, 62362),

Gene: Arbiter_68 Start: 59054, Stop: 58752, Start Num: 50
Candidate Starts for Arbiter_68:
(Start: 50 @59054 has 81 MA's), (61, 58955), (64, 58934), (68, 58913), (79, 58802), (83, 58781), (84, 58775), (86, 58769),

Gene: Ares_70 Start: 59025, Stop: 58723, Start Num: 50
Candidate Starts for Ares_70:
(Start: 50 @59025 has 81 MA's), (61, 58926), (64, 58905), (68, 58884), (79, 58773), (83, 58752), (84, 58746), (86, 58740),

Gene: Argie_71 Start: 51295, Stop: 51594, Start Num: 50
Candidate Starts for Argie_71:
(30, 51214), (Start: 50 @51295 has 81 MA's), (61, 51394), (64, 51415), (70, 51445), (74, 51502), (79, 51553), (85, 51583),

Gene: Ashraf_85 Start: 63370, Stop: 63068, Start Num: 43
Candidate Starts for Ashraf_85:
(Start: 23 @63451 has 34 MA's), (Start: 43 @63370 has 230 MA's), (55, 63301), (61, 63253), (64, 63232), (72, 63193),

Gene: Athena_82 Start: 62010, Stop: 61681, Start Num: 50
Candidate Starts for Athena_82:
(Start: 50 @62010 has 81 MA's), (61, 61911), (64, 61890), (68, 61869),

Gene: Audrey_80 Start: 61264, Stop: 60935, Start Num: 50
Candidate Starts for Audrey_80:
(Start: 50 @61264 has 81 MA's), (61, 61165), (64, 61144), (68, 61123),

Gene: Badfish_85 Start: 63561, Stop: 63259, Start Num: 43
Candidate Starts for Badfish_85:
(Start: 23 @63642 has 34 MA's), (Start: 43 @63561 has 230 MA's), (61, 63444), (64, 63423), (72, 63384),

Gene: Baloo_79 Start: 61116, Stop: 60787, Start Num: 50
Candidate Starts for Baloo_79:
(Start: 50 @61116 has 81 MA's), (61, 61017), (64, 60996), (68, 60975),

Gene: Bananafish_71 Start: 58955, Stop: 58653, Start Num: 50
Candidate Starts for Bananafish_71:
(Start: 50 @58955 has 81 MA's), (57, 58895), (61, 58856), (64, 58835), (68, 58814), (79, 58703), (83, 58682), (84, 58676), (86, 58670),

Gene: Banjo_81 Start: 62827, Stop: 62525, Start Num: 43
Candidate Starts for Banjo_81:
(Start: 23 @62908 has 34 MA's), (Start: 43 @62827 has 230 MA's), (55, 62758), (61, 62710), (64, 62689), (72, 62650),

Gene: Barnyard_87 Start: 60478, Stop: 60789, Start Num: 36
Candidate Starts for Barnyard_87:
(Start: 36 @60478 has 1 MA's), (Start: 50 @60529 has 81 MA's), (54, 60562), (58, 60592), (59, 60601), (69, 60646), (71, 60652),

Gene: Basato_83 Start: 63292, Stop: 62990, Start Num: 43
Candidate Starts for Basato_83:
(Start: 23 @63373 has 34 MA's), (Start: 43 @63292 has 230 MA's), (61, 63175), (64, 63154), (72, 63115),

Gene: BatteryCK_82 Start: 62818, Stop: 62516, Start Num: 43
Candidate Starts for BatteryCK_82:
(Start: 23 @62899 has 34 MA's), (Start: 43 @62818 has 230 MA's), (55, 62749), (61, 62701), (64, 62680), (72, 62641),

Gene: Beaglebox_81 Start: 62950, Stop: 62648, Start Num: 43
Candidate Starts for Beaglebox_81:
(Start: 23 @63031 has 34 MA's), (Start: 43 @62950 has 230 MA's), (55, 62881), (61, 62833), (64, 62812), (72, 62773),

Gene: Bernardo_81 Start: 61454, Stop: 61125, Start Num: 50
Candidate Starts for Bernardo_81:
(Start: 50 @61454 has 81 MA's), (61, 61355), (64, 61334), (68, 61313),

Gene: Bishoperium_84 Start: 63397, Stop: 63095, Start Num: 43
Candidate Starts for Bishoperium_84:
(Start: 23 @63478 has 34 MA's), (Start: 43 @63397 has 230 MA's), (64, 63259), (72, 63220),

Gene: BlackStallion_83 Start: 63247, Stop: 62945, Start Num: 43

Candidate Starts for BlackStallion_83:

(Start: 23 @63328 has 34 MA's), (Start: 43 @63247 has 230 MA's), (55, 63178), (61, 63130), (64, 63109), (72, 63070),

Gene: Blocker23_70 Start: 59020, Stop: 58718, Start Num: 50

Candidate Starts for Blocker23_70:

(Start: 50 @59020 has 81 MA's), (57, 58960), (61, 58921), (64, 58900), (68, 58879), (79, 58768), (83, 58747), (84, 58741), (86, 58735),

Gene: Bloom_201 Start: 137606, Stop: 137896, Start Num: 44

Candidate Starts for Bloom_201:

(33, 137570), (Start: 44 @137606 has 7 MA's), (63, 137723), (75, 137825),

Gene: BlueHusk_85 Start: 63070, Stop: 62768, Start Num: 43

Candidate Starts for BlueHusk_85:

(Start: 23 @63151 has 34 MA's), (Start: 43 @63070 has 230 MA's), (61, 62953), (64, 62932), (72, 62893),

Gene: Bluephacebaby_83 Start: 63430, Stop: 63128, Start Num: 43

Candidate Starts for Bluephacebaby_83:

(Start: 23 @63511 has 34 MA's), (Start: 43 @63430 has 230 MA's), (61, 63313), (64, 63292), (72, 63253),

Gene: BobRoss2024_79 Start: 57680, Stop: 57384, Start Num: 40

Candidate Starts for BobRoss2024_79:

(40, 57680), (69, 57527), (76, 57452),

Gene: Boehler_83 Start: 63221, Stop: 62919, Start Num: 43

Candidate Starts for Boehler_83:

(Start: 23 @63302 has 34 MA's), (Start: 43 @63221 has 230 MA's), (61, 63104), (64, 63083), (72, 63044),

Gene: Boyle_70 Start: 59064, Stop: 58762, Start Num: 50

Candidate Starts for Boyle_70:

(Start: 50 @59064 has 81 MA's), (57, 59004), (61, 58965), (64, 58944), (68, 58923), (79, 58812), (83, 58791), (84, 58785), (86, 58779),

Gene: Briakila_80 Start: 61462, Stop: 61133, Start Num: 50

Candidate Starts for Briakila_80:

(Start: 50 @61462 has 81 MA's), (61, 61363), (64, 61342), (68, 61321),

Gene: Brilliant_87 Start: 63410, Stop: 63108, Start Num: 43

Candidate Starts for Brilliant_87:

(Start: 23 @63491 has 34 MA's), (Start: 43 @63410 has 230 MA's), (61, 63293), (64, 63272), (72, 63233),

Gene: Brownie5_70 Start: 59065, Stop: 58763, Start Num: 50

Candidate Starts for Brownie5_70:

(Start: 50 @59065 has 81 MA's), (57, 59005), (61, 58966), (64, 58945), (68, 58924), (79, 58813), (83, 58792), (84, 58786), (86, 58780),

Gene: Buckeye_84 Start: 63948, Stop: 63646, Start Num: 43

Candidate Starts for Buckeye_84:

(Start: 23 @64029 has 34 MA's), (Start: 43 @63948 has 230 MA's), (61, 63831), (64, 63810), (72, 63771),

Gene: Burr_84 Start: 62882, Stop: 62580, Start Num: 43

Candidate Starts for Burr_84:

(Start: 23 @62963 has 34 MA's), (Start: 43 @62882 has 230 MA's), (61, 62765), (64, 62744), (72, 62705),

Gene: CaiB_78 Start: 58156, Stop: 57857, Start Num: 41

Candidate Starts for CaiB_78:

(Start: 41 @58156 has 5 MA's), (65, 58024), (69, 58006), (79, 57895),

Gene: Calamitous_71 Start: 58954, Stop: 58652, Start Num: 50

Candidate Starts for Calamitous_71:

(Start: 50 @58954 has 81 MA's), (57, 58894), (61, 58855), (64, 58834), (68, 58813), (79, 58702), (83, 58681), (84, 58675), (86, 58669),

Gene: CamL_84 Start: 63182, Stop: 62880, Start Num: 43

Candidate Starts for CamL_84:

(Start: 23 @63263 has 34 MA's), (Start: 43 @63182 has 230 MA's), (55, 63113), (61, 63065), (64, 63044), (72, 63005),

Gene: CampRoach_85 Start: 63278, Stop: 62976, Start Num: 43

Candidate Starts for CampRoach_85:

(Start: 23 @63359 has 34 MA's), (Start: 43 @63278 has 230 MA's), (61, 63161), (64, 63140), (72, 63101),

Gene: Cannibal_85 Start: 63284, Stop: 62982, Start Num: 43

Candidate Starts for Cannibal_85:

(Start: 23 @63365 has 34 MA's), (Start: 43 @63284 has 230 MA's), (61, 63167), (64, 63146), (72, 63107),

Gene: Carthage_85 Start: 62952, Stop: 62650, Start Num: 43

Candidate Starts for Carthage_85:

(Start: 23 @63033 has 34 MA's), (Start: 43 @62952 has 230 MA's), (61, 62835), (64, 62814), (72, 62775),

Gene: Casbah_80 Start: 61575, Stop: 61246, Start Num: 50

Candidate Starts for Casbah_80:

(Start: 50 @61575 has 81 MA's), (61, 61476), (64, 61455), (68, 61434),

Gene: Caspiboi_85 Start: 63117, Stop: 62815, Start Num: 43

Candidate Starts for Caspiboi_85:

(Start: 23 @63198 has 34 MA's), (Start: 43 @63117 has 230 MA's), (61, 63000), (64, 62979),

Gene: Cepens_66 Start: 49145, Stop: 49444, Start Num: 50

Candidate Starts for Cepens_66:

(Start: 50 @49145 has 81 MA's), (61, 49244), (64, 49265), (70, 49295), (74, 49352), (79, 49403), (85, 49433),

Gene: ChaChing_80 Start: 61280, Stop: 60951, Start Num: 50

Candidate Starts for ChaChing_80:

(Start: 50 @61280 has 81 MA's), (61, 61181), (64, 61160), (68, 61139),

Gene: Chaelin_85 Start: 63412, Stop: 63110, Start Num: 43
Candidate Starts for Chaelin_85:
(Start: 23 @63493 has 34 MA's), (Start: 43 @63412 has 230 MA's), (55, 63343), (61, 63295), (64, 63274), (72, 63235),

Gene: Chalmers_79 Start: 61710, Stop: 61381, Start Num: 50
Candidate Starts for Chalmers_79:
(Start: 50 @61710 has 81 MA's), (61, 61611), (64, 61590), (68, 61569),

Gene: Chandler_80 Start: 62051, Stop: 61722, Start Num: 50
Candidate Starts for Chandler_80:
(Start: 50 @62051 has 81 MA's), (61, 61952), (64, 61931), (68, 61910),

Gene: Charles1_85 Start: 63190, Stop: 62888, Start Num: 43
Candidate Starts for Charles1_85:
(Start: 23 @63271 has 34 MA's), (Start: 43 @63190 has 230 MA's), (61, 63073), (64, 63052), (72, 63013),

Gene: CharlieGBrown_82 Start: 62913, Stop: 62611, Start Num: 43
Candidate Starts for CharlieGBrown_82:
(Start: 23 @62994 has 34 MA's), (Start: 43 @62913 has 230 MA's), (55, 62844), (61, 62796), (64, 62775), (72, 62736),

Gene: CheetO_81 Start: 63368, Stop: 62985, Start Num: 23
Candidate Starts for CheetO_81:
(Start: 23 @63368 has 34 MA's), (Start: 43 @63287 has 230 MA's), (61, 63170), (64, 63149), (72, 63110),

Gene: Chentzyk_82 Start: 62218, Stop: 61889, Start Num: 50
Candidate Starts for Chentzyk_82:
(Start: 50 @62218 has 81 MA's), (61, 62119), (64, 62098), (68, 62077),

Gene: Cher_84 Start: 63384, Stop: 63082, Start Num: 43
Candidate Starts for Cher_84:
(Start: 23 @63465 has 34 MA's), (Start: 43 @63384 has 230 MA's), (61, 63267), (64, 63246), (72, 63207),

Gene: Childish_84 Start: 63575, Stop: 63273, Start Num: 43
Candidate Starts for Childish_84:
(Start: 23 @63656 has 34 MA's), (Start: 43 @63575 has 230 MA's), (61, 63458), (64, 63437), (72, 63398),

Gene: Chipette_83 Start: 63112, Stop: 62810, Start Num: 43
Candidate Starts for Chipette_83:
(Start: 23 @63193 has 34 MA's), (Start: 43 @63112 has 230 MA's), (61, 62995), (64, 62974), (72, 62935),

Gene: Chorkpop_85 Start: 63038, Stop: 62736, Start Num: 43
Candidate Starts for Chorkpop_85:
(Start: 23 @63119 has 34 MA's), (Start: 43 @63038 has 230 MA's), (61, 62921), (64, 62900), (72, 62861),

Gene: Chunky_84 Start: 62964, Stop: 62581, Start Num: 23

Candidate Starts for Chunky_84:

(Start: 23 @62964 has 34 MA's), (Start: 43 @62883 has 230 MA's), (61, 62766), (64, 62745), (72, 62706),

Gene: Chute_84 Start: 63577, Stop: 63275, Start Num: 43

Candidate Starts for Chute_84:

(Start: 23 @63658 has 34 MA's), (Start: 43 @63577 has 230 MA's), (55, 63508), (61, 63460), (64, 63439), (72, 63400),

Gene: CloverMinnie_76 Start: 57325, Stop: 57026, Start Num: 41

Candidate Starts for CloverMinnie_76:

(Start: 41 @57325 has 5 MA's), (56, 57247), (65, 57193), (69, 57175), (79, 57064),

Gene: Cobra_84 Start: 63408, Stop: 63106, Start Num: 43

Candidate Starts for Cobra_84:

(Start: 23 @63489 has 34 MA's), (Start: 43 @63408 has 230 MA's), (61, 63291), (64, 63270), (72, 63231),

Gene: Coffee_70 Start: 59058, Stop: 58756, Start Num: 50

Candidate Starts for Coffee_70:

(Start: 50 @59058 has 81 MA's), (57, 58998), (61, 58959), (64, 58938), (68, 58917), (79, 58806), (83, 58785), (84, 58779), (86, 58773),

Gene: Colbert_82 Start: 62306, Stop: 62004, Start Num: 43

Candidate Starts for Colbert_82:

(Start: 23 @62387 has 34 MA's), (Start: 43 @62306 has 230 MA's), (64, 62168), (72, 62129),

Gene: Coletti_86 Start: 63933, Stop: 63631, Start Num: 43

Candidate Starts for Coletti_86:

(Start: 23 @64014 has 34 MA's), (Start: 43 @63933 has 230 MA's), (55, 63864), (61, 63816), (64, 63795), (72, 63756),

Gene: Cornbread_84 Start: 63065, Stop: 62763, Start Num: 43

Candidate Starts for Cornbread_84:

(Start: 23 @63146 has 34 MA's), (Start: 43 @63065 has 230 MA's), (61, 62948), (64, 62927), (72, 62888),

Gene: Cornobble_82 Start: 62876, Stop: 62574, Start Num: 43

Candidate Starts for Cornobble_82:

(Start: 23 @62957 has 34 MA's), (Start: 43 @62876 has 230 MA's), (64, 62738), (72, 62699),

Gene: Corofin_80 Start: 61286, Stop: 60957, Start Num: 50

Candidate Starts for Corofin_80:

(Start: 50 @61286 has 81 MA's), (61, 61187), (64, 61166), (68, 61145),

Gene: Cosmolli16_86 Start: 63753, Stop: 63451, Start Num: 43

Candidate Starts for Cosmolli16_86:

(Start: 23 @63834 has 34 MA's), (Start: 43 @63753 has 230 MA's), (61, 63636), (64, 63615), (72, 63576),

Gene: Craff_86 Start: 63796, Stop: 63494, Start Num: 43

Candidate Starts for Craff_86:

(Start: 23 @63877 has 34 MA's), (Start: 43 @63796 has 230 MA's), (61, 63679), (64, 63658), (72, 63619),

Gene: D12_66 Start: 49780, Stop: 50079, Start Num: 50

Candidate Starts for D12_66:

(Start: 50 @49780 has 81 MA's), (61, 49879), (64, 49900), (70, 49930), (74, 49987), (79, 50038), (85, 50068),

Gene: DaddyDaniels_87 Start: 63529, Stop: 63227, Start Num: 43

Candidate Starts for DaddyDaniels_87:

(Start: 23 @63610 has 34 MA's), (Start: 43 @63529 has 230 MA's), (61, 63412), (64, 63391), (72, 63352),

Gene: Daffy_83 Start: 63023, Stop: 62721, Start Num: 43

Candidate Starts for Daffy_83:

(Start: 23 @63104 has 34 MA's), (Start: 43 @63023 has 230 MA's), (61, 62906), (64, 62885), (72, 62846),

Gene: Daisy_79 Start: 60837, Stop: 60508, Start Num: 50

Candidate Starts for Daisy_79:

(Start: 50 @60837 has 81 MA's), (61, 60738), (64, 60717), (68, 60696),

Gene: Daka_86 Start: 63229, Stop: 62927, Start Num: 43

Candidate Starts for Daka_86:

(Start: 23 @63310 has 34 MA's), (Start: 43 @63229 has 230 MA's), (64, 63091), (72, 63052),

Gene: Dati_81 Start: 63207, Stop: 62905, Start Num: 43

Candidate Starts for Dati_81:

(Start: 23 @63288 has 34 MA's), (Start: 43 @63207 has 230 MA's), (61, 63090), (64, 63069), (72, 63030),

Gene: Deenasa_80 Start: 62186, Stop: 61857, Start Num: 50

Candidate Starts for Deenasa_80:

(Start: 50 @62186 has 81 MA's), (61, 62087), (64, 62066), (68, 62045),

Gene: DelRivs_82 Start: 62836, Stop: 62534, Start Num: 43

Candidate Starts for DelRivs_82:

(Start: 23 @62917 has 34 MA's), (Start: 43 @62836 has 230 MA's), (61, 62719), (64, 62698), (72, 62659),

Gene: Derpp_84 Start: 63027, Stop: 62644, Start Num: 23

Candidate Starts for Derpp_84:

(Start: 23 @63027 has 34 MA's), (Start: 43 @62946 has 230 MA's), (61, 62829), (64, 62808), (72, 62769),

Gene: Dice_83 Start: 62868, Stop: 62566, Start Num: 43

Candidate Starts for Dice_83:

(Start: 23 @62949 has 34 MA's), (Start: 43 @62868 has 230 MA's), (61, 62751), (64, 62730), (72, 62691),

Gene: Dingo_81 Start: 62589, Stop: 62287, Start Num: 43

Candidate Starts for Dingo_81:

(Start: 23 @62670 has 34 MA's), (Start: 43 @62589 has 230 MA's), (61, 62472), (64, 62451), (72, 62412),

Gene: Dione_82 Start: 62588, Stop: 62286, Start Num: 43

Candidate Starts for Dione_82:

(Start: 23 @62669 has 34 MA's), (Start: 43 @62588 has 230 MA's), (55, 62519), (61, 62471), (64, 62450), (72, 62411),

Gene: DirtJuice_84 Start: 63328, Stop: 63026, Start Num: 43

Candidate Starts for DirtJuice_84:

(Start: 23 @63409 has 34 MA's), (Start: 43 @63328 has 230 MA's), (61, 63211), (64, 63190), (72, 63151),

Gene: Doddsville_82 Start: 63109, Stop: 62726, Start Num: 23

Candidate Starts for Doddsville_82:

(Start: 23 @63109 has 34 MA's), (Start: 43 @63028 has 230 MA's), (55, 62959), (61, 62911), (64, 62890), (72, 62851),

Gene: DoesntMatter_81 Start: 62864, Stop: 62562, Start Num: 43

Candidate Starts for DoesntMatter_81:

(Start: 23 @62945 has 34 MA's), (Start: 43 @62864 has 230 MA's), (61, 62747), (64, 62726), (72, 62687),

Gene: DonSanchon_80 Start: 62546, Stop: 62244, Start Num: 43

Candidate Starts for DonSanchon_80:

(Start: 23 @62627 has 34 MA's), (Start: 43 @62546 has 230 MA's), (55, 62477), (61, 62429), (64, 62408), (72, 62369),

Gene: DuchessDung_82 Start: 62625, Stop: 62242, Start Num: 23

Candidate Starts for DuchessDung_82:

(Start: 23 @62625 has 34 MA's), (Start: 43 @62544 has 230 MA's), (55, 62475), (61, 62427), (64, 62406), (72, 62367),

Gene: Duggie_84 Start: 63170, Stop: 62868, Start Num: 43

Candidate Starts for Duggie_84:

(Start: 23 @63251 has 34 MA's), (Start: 43 @63170 has 230 MA's), (61, 63053), (64, 63032), (72, 62993),

Gene: DunneganBoMo_196 Start: 141037, Stop: 141381, Start Num: 32

Candidate Starts for DunneganBoMo_196:

(32, 141037), (78, 141343),

Gene: Durga_86 Start: 63652, Stop: 63350, Start Num: 43

Candidate Starts for Durga_86:

(Start: 23 @63733 has 34 MA's), (Start: 43 @63652 has 230 MA's), (61, 63535), (64, 63514), (72, 63475),

Gene: Eaglehorse_70 Start: 58944, Stop: 58642, Start Num: 50

Candidate Starts for Eaglehorse_70:

(Start: 50 @58944 has 81 MA's), (57, 58884), (61, 58845), (64, 58824), (68, 58803), (79, 58692), (83, 58671), (84, 58665), (86, 58659),

Gene: ElvisPhasley_90 Start: 64194, Stop: 63892, Start Num: 43

Candidate Starts for ElvisPhasley_90:

(Start: 23 @64275 has 34 MA's), (Start: 43 @64194 has 230 MA's), (61, 64077), (64, 64056), (72, 64017),

Gene: Emiris_86 Start: 63558, Stop: 63256, Start Num: 43

Candidate Starts for Emiris_86:

(Start: 23 @63639 has 34 MA's), (Start: 43 @63558 has 230 MA's), (61, 63441), (64, 63420), (72, 63381),

Gene: EmpTee_83 Start: 62960, Stop: 62658, Start Num: 43

Candidate Starts for EmpTee_83:

(Start: 23 @63041 has 34 MA's), (Start: 43 @62960 has 230 MA's), (55, 62891), (61, 62843), (64, 62822), (72, 62783),

Gene: Eremos_83 Start: 63331, Stop: 62948, Start Num: 23

Candidate Starts for Eremos_83:

(Start: 23 @63331 has 34 MA's), (Start: 43 @63250 has 230 MA's), (61, 63133), (64, 63112), (72, 63073),

Gene: Etaye_83 Start: 63736, Stop: 63434, Start Num: 43

Candidate Starts for Etaye_83:

(Start: 23 @63817 has 34 MA's), (Start: 43 @63736 has 230 MA's), (61, 63619), (64, 63598), (72, 63559),

Gene: Eugenia_86 Start: 63671, Stop: 63369, Start Num: 43

Candidate Starts for Eugenia_86:

(Start: 23 @63752 has 34 MA's), (Start: 43 @63671 has 230 MA's), (61, 63554), (64, 63533), (72, 63494),

Gene: Faze9_69 Start: 59082, Stop: 58780, Start Num: 50

Candidate Starts for Faze9_69:

(Start: 50 @59082 has 81 MA's), (61, 58983), (64, 58962), (68, 58941), (79, 58830), (83, 58809), (84, 58803), (86, 58797),

Gene: FluffyNinja_85 Start: 63249, Stop: 62947, Start Num: 43

Candidate Starts for FluffyNinja_85:

(Start: 23 @63330 has 34 MA's), (Start: 43 @63249 has 230 MA's), (55, 63180), (61, 63132), (64, 63111), (72, 63072),

Gene: Fozzie_82 Start: 63575, Stop: 63273, Start Num: 43

Candidate Starts for Fozzie_82:

(Start: 23 @63656 has 34 MA's), (Start: 43 @63575 has 230 MA's), (61, 63458), (64, 63437), (72, 63398),

Gene: Frankicide_83 Start: 63074, Stop: 62772, Start Num: 43

Candidate Starts for Frankicide_83:

(Start: 23 @63155 has 34 MA's), (Start: 43 @63074 has 230 MA's), (61, 62957), (64, 62936), (72, 62897),

Gene: FrenchFry_71 Start: 59069, Stop: 58767, Start Num: 50

Candidate Starts for FrenchFry_71:

(Start: 50 @59069 has 81 MA's), (57, 59009), (61, 58970), (64, 58949), (68, 58928), (79, 58817), (83, 58796), (84, 58790), (86, 58784),

Gene: Freya_81 Start: 62566, Stop: 62264, Start Num: 43

Candidate Starts for Freya_81:

(Start: 23 @62647 has 34 MA's), (Start: 43 @62566 has 230 MA's), (61, 62449), (64, 62428), (72, 62389),

Gene: FriarPreacher_82 Start: 63028, Stop: 62645, Start Num: 23

Candidate Starts for FriarPreacher_82:

(Start: 23 @63028 has 34 MA's), (Start: 43 @62947 has 230 MA's), (61, 62830), (64, 62809), (72, 62770),

Gene: Fringe_88 Start: 63724, Stop: 63422, Start Num: 43

Candidate Starts for Fringe_88:

(Start: 23 @63805 has 34 MA's), (Start: 43 @63724 has 230 MA's), (61, 63607), (64, 63586), (72, 63547),

Gene: FugateOSU_84 Start: 64008, Stop: 63706, Start Num: 43

Candidate Starts for FugateOSU_84:

(Start: 23 @64089 has 34 MA's), (Start: 43 @64008 has 230 MA's), (55, 63939), (61, 63891), (64, 63870), (72, 63831),

Gene: Gadget_81 Start: 61637, Stop: 61308, Start Num: 50

Candidate Starts for Gadget_81:

(Start: 50 @61637 has 81 MA's), (61, 61538), (64, 61517), (68, 61496),

Gene: Gareth_84 Start: 63396, Stop: 63094, Start Num: 43

Candidate Starts for Gareth_84:

(Start: 23 @63477 has 34 MA's), (Start: 43 @63396 has 230 MA's), (61, 63279), (64, 63258), (72, 63219),

Gene: GeneCoco_85 Start: 63576, Stop: 63274, Start Num: 43

Candidate Starts for GeneCoco_85:

(Start: 23 @63657 has 34 MA's), (Start: 43 @63576 has 230 MA's), (61, 63459), (64, 63438), (72, 63399),

Gene: Gervas_81 Start: 61731, Stop: 61402, Start Num: 50

Candidate Starts for Gervas_81:

(Start: 50 @61731 has 81 MA's), (61, 61632), (64, 61611), (68, 61590),

Gene: Giraffe_84 Start: 63401, Stop: 63099, Start Num: 43

Candidate Starts for Giraffe_84:

(Start: 23 @63482 has 34 MA's), (Start: 43 @63401 has 230 MA's), (55, 63332), (61, 63284), (64, 63263), (72, 63224),

Gene: Glass_72 Start: 59070, Stop: 58768, Start Num: 50

Candidate Starts for Glass_72:

(Start: 50 @59070 has 81 MA's), (57, 59010), (61, 58971), (64, 58950), (68, 58929), (79, 58818), (83, 58797), (84, 58791), (86, 58785),

Gene: GlenHope_81 Start: 61310, Stop: 60981, Start Num: 50

Candidate Starts for GlenHope_81:

(Start: 50 @61310 has 81 MA's), (61, 61211), (64, 61190), (68, 61169),

Gene: Glubnar_80 Start: 61169, Stop: 60840, Start Num: 50
Candidate Starts for Glubnar_80:
(Start: 50 @61169 has 81 MA's), (61, 61070), (64, 61049), (68, 61028),

Gene: GodPhather_69 Start: 50749, Stop: 51048, Start Num: 50
Candidate Starts for GodPhather_69:
(30, 50668), (Start: 50 @50749 has 81 MA's), (61, 50848), (64, 50869), (70, 50899), (74, 50956), (79, 51007),

Gene: Godines_71 Start: 59323, Stop: 59021, Start Num: 50
Candidate Starts for Godines_71:
(Start: 50 @59323 has 81 MA's), (57, 59263), (61, 59224), (64, 59203), (68, 59182), (79, 59071), (83, 59050), (84, 59044), (86, 59038),

Gene: GoldenEssence_186 Start: 131868, Stop: 132158, Start Num: 44
Candidate Starts for GoldenEssence_186:
(33, 131832), (Start: 44 @131868 has 7 MA's), (75, 132087),

Gene: Gophee_84 Start: 63387, Stop: 63085, Start Num: 43
Candidate Starts for Gophee_84:
(Start: 23 @63468 has 34 MA's), (Start: 43 @63387 has 230 MA's), (61, 63270), (64, 63249), (72, 63210),

Gene: Grand2040_82 Start: 63365, Stop: 63063, Start Num: 43
Candidate Starts for Grand2040_82:
(Start: 23 @63446 has 34 MA's), (Start: 43 @63365 has 230 MA's), (61, 63248), (64, 63227), (72, 63188),

Gene: Gustav_45 Start: 33684, Stop: 33406, Start Num: 44
Candidate Starts for Gustav_45:
(16, 33798), (18, 33789), (24, 33756), (27, 33747), (Start: 44 @33684 has 7 MA's), (57, 33609), (61, 33582), (62, 33579), (65, 33558), (67, 33549), (75, 33471),

Gene: Gwennie1_81 Start: 63292, Stop: 62909, Start Num: 23
Candidate Starts for Gwennie1_81:
(Start: 23 @63292 has 34 MA's), (Start: 43 @63211 has 230 MA's), (61, 63094), (64, 63073), (72, 63034),

Gene: Gwilliam_85 Start: 64012, Stop: 63629, Start Num: 23
Candidate Starts for Gwilliam_85:
(Start: 23 @64012 has 34 MA's), (Start: 43 @63931 has 230 MA's), (61, 63814), (64, 63793), (72, 63754),

Gene: Gyarad_0083 Start: 62885, Stop: 62583, Start Num: 43
Candidate Starts for Gyarad_0083:
(Start: 23 @62966 has 34 MA's), (Start: 43 @62885 has 230 MA's), (61, 62768), (64, 62747), (72, 62708),

Gene: HSavage_82 Start: 62902, Stop: 62600, Start Num: 43
Candidate Starts for HSavage_82:
(Start: 23 @62983 has 34 MA's), (Start: 43 @62902 has 230 MA's), (61, 62785), (64, 62764), (72, 62725),

Gene: Haimas_82 Start: 62827, Stop: 62525, Start Num: 43
Candidate Starts for Haimas_82:
(Start: 23 @62908 has 34 MA's), (Start: 43 @62827 has 230 MA's), (61, 62710), (64, 62689), (72, 62650),

Gene: Haleema_83 Start: 62947, Stop: 62645, Start Num: 43
Candidate Starts for Haleema_83:
(Start: 23 @63028 has 34 MA's), (Start: 43 @62947 has 230 MA's), (64, 62809), (72, 62770),

Gene: Halfpint_79 Start: 61052, Stop: 60723, Start Num: 50
Candidate Starts for Halfpint_79:
(Start: 50 @61052 has 81 MA's), (61, 60953), (64, 60932), (68, 60911),

Gene: Hamish_81 Start: 63116, Stop: 62814, Start Num: 43
Candidate Starts for Hamish_81:
(Start: 23 @63197 has 34 MA's), (Start: 43 @63116 has 230 MA's), (61, 62999), (64, 62978), (72, 62939),

Gene: Hartsy_83 Start: 63145, Stop: 62762, Start Num: 23
Candidate Starts for Hartsy_83:
(Start: 23 @63145 has 34 MA's), (Start: 43 @63064 has 230 MA's), (55, 62995), (61, 62947), (64, 62926), (72, 62887),

Gene: Harvey_81 Start: 62724, Stop: 62422, Start Num: 43
Candidate Starts for Harvey_81:
(Start: 23 @62805 has 34 MA's), (Start: 43 @62724 has 230 MA's), (61, 62607), (64, 62586), (72, 62547),

Gene: HarveySr_79 Start: 60821, Stop: 60492, Start Num: 50
Candidate Starts for HarveySr_79:
(Start: 50 @60821 has 81 MA's), (61, 60722), (64, 60701), (68, 60680),

Gene: Heathcliff_80 Start: 61231, Stop: 60902, Start Num: 50
Candidate Starts for Heathcliff_80:
(Start: 50 @61231 has 81 MA's), (61, 61132), (64, 61111), (68, 61090),

Gene: Hedgerow_70 Start: 59020, Stop: 58718, Start Num: 50
Candidate Starts for Hedgerow_70:
(Start: 50 @59020 has 81 MA's), (57, 58960), (61, 58921), (64, 58900), (68, 58879), (79, 58768), (83, 58747), (84, 58741), (86, 58735),

Gene: Held_82 Start: 62845, Stop: 62543, Start Num: 43
Candidate Starts for Held_82:
(Start: 23 @62926 has 34 MA's), (Start: 43 @62845 has 230 MA's), (61, 62728), (64, 62707), (72, 62668),

Gene: HenryJackson_85 Start: 63564, Stop: 63262, Start Num: 43
Candidate Starts for HenryJackson_85:
(Start: 23 @63645 has 34 MA's), (Start: 43 @63564 has 230 MA's), (61, 63447), (64, 63426), (72, 63387),

Gene: Hertubise_84 Start: 63287, Stop: 62904, Start Num: 23
Candidate Starts for Hertubise_84:

(Start: 23 @63287 has 34 MA's), (Start: 43 @63206 has 230 MA's), (61, 63089), (64, 63068), (72, 63029),

Gene: Hetaeria_84 Start: 63213, Stop: 62911, Start Num: 43

Candidate Starts for Hetaeria_84:

(Start: 23 @63294 has 34 MA's), (Start: 43 @63213 has 230 MA's), (61, 63096), (64, 63075), (72, 63036),

Gene: HighStump_85 Start: 63351, Stop: 63049, Start Num: 43

Candidate Starts for HighStump_85:

(Start: 23 @63432 has 34 MA's), (Start: 43 @63351 has 230 MA's), (61, 63234), (64, 63213), (72, 63174),

Gene: Hocus_82 Start: 62865, Stop: 62563, Start Num: 43

Candidate Starts for Hocus_82:

(Start: 23 @62946 has 34 MA's), (Start: 43 @62865 has 230 MA's), (61, 62748), (64, 62727), (72, 62688),

Gene: Holeinone_70 Start: 58925, Stop: 58623, Start Num: 50

Candidate Starts for Holeinone_70:

(Start: 50 @58925 has 81 MA's), (57, 58865), (61, 58826), (64, 58805), (68, 58784), (79, 58673), (83, 58652), (84, 58646), (86, 58640),

Gene: Horchata_81 Start: 63042, Stop: 62740, Start Num: 43

Candidate Starts for Horchata_81:

(Start: 23 @63123 has 34 MA's), (Start: 43 @63042 has 230 MA's), (61, 62925), (64, 62904), (72, 62865),

Gene: ImtiyazSitla_85 Start: 63370, Stop: 63068, Start Num: 43

Candidate Starts for ImtiyazSitla_85:

(Start: 23 @63451 has 34 MA's), (Start: 43 @63370 has 230 MA's), (55, 63301), (61, 63253), (64, 63232), (72, 63193),

Gene: Inchworm_85 Start: 63238, Stop: 62936, Start Num: 43

Candidate Starts for Inchworm_85:

(Start: 23 @63319 has 34 MA's), (Start: 43 @63238 has 230 MA's), (55, 63169), (61, 63121), (64, 63100), (72, 63061),

Gene: Inverness_82 Start: 63039, Stop: 62737, Start Num: 43

Candidate Starts for Inverness_82:

(Start: 23 @63120 has 34 MA's), (Start: 43 @63039 has 230 MA's), (61, 62922), (64, 62901), (72, 62862),

Gene: Iridessa_88 Start: 62963, Stop: 62661, Start Num: 43

Candidate Starts for Iridessa_88:

(Start: 23 @63044 has 34 MA's), (Start: 43 @62963 has 230 MA's), (61, 62846), (64, 62825), (72, 62786),

Gene: Iridoclysis_83 Start: 63129, Stop: 62827, Start Num: 43

Candidate Starts for Iridoclysis_83:

(Start: 23 @63210 has 34 MA's), (Start: 43 @63129 has 230 MA's), (55, 63060), (61, 63012), (64, 62991), (72, 62952),

Gene: IsaacEli_86 Start: 63369, Stop: 63067, Start Num: 43

Candidate Starts for IsaacEli_86:

(Start: 23 @63450 has 34 MA's), (Start: 43 @63369 has 230 MA's), (61, 63252), (64, 63231), (72, 63192),

Gene: ItsyBitsy1_69 Start: 59161, Stop: 58859, Start Num: 50

Candidate Starts for ItsyBitsy1_69:

(Start: 50 @59161 has 81 MA's), (57, 59101), (61, 59062), (64, 59041), (68, 59020), (79, 58909), (83, 58888), (84, 58882), (86, 58876),

Gene: JDog_83 Start: 63399, Stop: 63097, Start Num: 43

Candidate Starts for JDog_83:

(Start: 23 @63480 has 34 MA's), (Start: 43 @63399 has 230 MA's), (61, 63282), (64, 63261), (72, 63222),

Gene: JacAttac_84 Start: 62843, Stop: 62541, Start Num: 43

Candidate Starts for JacAttac_84:

(Start: 23 @62924 has 34 MA's), (Start: 43 @62843 has 230 MA's), (55, 62774), (61, 62726), (64, 62705), (72, 62666),

Gene: Jackstina_75 Start: 61145, Stop: 60816, Start Num: 50

Candidate Starts for Jackstina_75:

(Start: 50 @61145 has 81 MA's), (61, 61046), (64, 61025), (68, 61004),

Gene: JakeO_85 Start: 63127, Stop: 62825, Start Num: 43

Candidate Starts for JakeO_85:

(Start: 23 @63208 has 34 MA's), (Start: 43 @63127 has 230 MA's), (61, 63010), (64, 62989), (72, 62950),

Gene: JangoPhett_82 Start: 63203, Stop: 62901, Start Num: 43

Candidate Starts for JangoPhett_82:

(Start: 23 @63284 has 34 MA's), (Start: 43 @63203 has 230 MA's), (61, 63086), (64, 63065), (72, 63026),

Gene: Jesabah_83 Start: 63966, Stop: 63664, Start Num: 43

Candidate Starts for Jesabah_83:

(Start: 23 @64047 has 34 MA's), (Start: 43 @63966 has 230 MA's), (61, 63849), (64, 63828), (72, 63789),

Gene: Jillium_85 Start: 63559, Stop: 63257, Start Num: 43

Candidate Starts for Jillium_85:

(Start: 23 @63640 has 34 MA's), (Start: 43 @63559 has 230 MA's), (61, 63442), (64, 63421), (72, 63382),

Gene: Jiminy_84 Start: 63063, Stop: 62761, Start Num: 43

Candidate Starts for Jiminy_84:

(Start: 23 @63144 has 34 MA's), (Start: 43 @63063 has 230 MA's), (55, 62994), (61, 62946), (64, 62925), (72, 62886),

Gene: Jiraiya_85 Start: 63147, Stop: 62845, Start Num: 43

Candidate Starts for Jiraiya_85:

(Start: 23 @63228 has 34 MA's), (Start: 43 @63147 has 230 MA's), (61, 63030), (64, 63009), (72, 62970),

Gene: KLucky39_82 Start: 62922, Stop: 62620, Start Num: 43

Candidate Starts for KLucky39_82:

(Start: 23 @63003 has 34 MA's), (Start: 43 @62922 has 230 MA's), (61, 62805), (64, 62784), (72, 62745),

Gene: Kahve_85 Start: 63562, Stop: 63260, Start Num: 43

Candidate Starts for Kahve_85:

(Start: 23 @63643 has 34 MA's), (Start: 43 @63562 has 230 MA's), (61, 63445), (64, 63424), (72, 63385),

Gene: Kailash_82 Start: 63262, Stop: 62960, Start Num: 43

Candidate Starts for Kailash_82:

(Start: 23 @63343 has 34 MA's), (Start: 43 @63262 has 230 MA's), (55, 63193), (61, 63145), (64, 63124), (72, 63085),

Gene: Kaleb_71 Start: 59076, Stop: 58774, Start Num: 50

Candidate Starts for Kaleb_71:

(Start: 50 @59076 has 81 MA's), (57, 59016), (61, 58977), (64, 58956), (68, 58935), (79, 58824), (83, 58803), (84, 58797), (86, 58791),

Gene: Kamiyu_80 Start: 61234, Stop: 60905, Start Num: 50

Candidate Starts for Kamiyu_80:

(Start: 50 @61234 has 81 MA's), (61, 61135), (64, 61114), (68, 61093),

Gene: KarasumaRum_75 Start: 62138, Stop: 61818, Start Num: 45

Candidate Starts for KarasumaRum_75:

(27, 62207), (29, 62204), (37, 62162), (45, 62138), (61, 62021), (65, 61997), (69, 61979), (71, 61973), (72, 61961), (79, 61871), (88, 61829),

Gene: Katniss_86 Start: 62978, Stop: 62676, Start Num: 43

Candidate Starts for Katniss_86:

(Start: 23 @63059 has 34 MA's), (Start: 43 @62978 has 230 MA's), (55, 62909), (61, 62861), (64, 62840), (72, 62801),

Gene: Keitherie_87 Start: 63620, Stop: 63318, Start Num: 43

Candidate Starts for Keitherie_87:

(Start: 23 @63701 has 34 MA's), (Start: 43 @63620 has 230 MA's), (55, 63551), (61, 63503), (64, 63482), (72, 63443),

Gene: Khan1_84 Start: 63341, Stop: 63039, Start Num: 43

Candidate Starts for Khan1_84:

(Start: 23 @63422 has 34 MA's), (Start: 43 @63341 has 230 MA's), (61, 63224), (64, 63203), (72, 63164),

Gene: Kheth_70 Start: 58987, Stop: 58685, Start Num: 50

Candidate Starts for Kheth_70:

(Start: 50 @58987 has 81 MA's), (57, 58927), (61, 58888), (64, 58867), (68, 58846), (79, 58735), (83, 58714), (84, 58708), (86, 58702),

Gene: Kikipoo_86 Start: 63369, Stop: 63067, Start Num: 43

Candidate Starts for Kikipoo_86:

(Start: 23 @63450 has 34 MA's), (Start: 43 @63369 has 230 MA's), (61, 63252), (64, 63231), (72, 63192),

Gene: Kimbrough_85 Start: 63441, Stop: 63139, Start Num: 43

Candidate Starts for Kimbrough_85:

(Start: 23 @63522 has 34 MA's), (Start: 43 @63441 has 230 MA's), (61, 63324), (64, 63303), (72, 63264),

Gene: KingTut_75 Start: 59601, Stop: 59299, Start Num: 43

Candidate Starts for KingTut_75:

(Start: 23 @59682 has 34 MA's), (Start: 43 @59601 has 230 MA's), (61, 59484), (64, 59463), (72, 59424),

Gene: KingVeVeVe_82 Start: 62576, Stop: 62274, Start Num: 43

Candidate Starts for KingVeVeVe_82:

(Start: 23 @62657 has 34 MA's), (Start: 43 @62576 has 230 MA's), (61, 62459), (64, 62438), (72, 62399),

Gene: KlimbOn_83 Start: 62881, Stop: 62579, Start Num: 43

Candidate Starts for KlimbOn_83:

(Start: 23 @62962 has 34 MA's), (Start: 43 @62881 has 230 MA's), (61, 62764), (64, 62743), (72, 62704),

Gene: Kloppinator_84 Start: 63012, Stop: 62710, Start Num: 43

Candidate Starts for Kloppinator_84:

(Start: 23 @63093 has 34 MA's), (Start: 43 @63012 has 230 MA's), (61, 62895), (64, 62874), (72, 62835),

Gene: Kolhan_71 Start: 58964, Stop: 58662, Start Num: 50

Candidate Starts for Kolhan_71:

(Start: 50 @58964 has 81 MA's), (61, 58865), (64, 58844), (68, 58823), (79, 58712), (83, 58691), (84, 58685), (86, 58679),

Gene: Kronus_80 Start: 62318, Stop: 61989, Start Num: 50

Candidate Starts for Kronus_80:

(Start: 50 @62318 has 81 MA's), (61, 62219), (64, 62198), (68, 62177),

Gene: Kumao_87 Start: 55246, Stop: 55530, Start Num: 47

Candidate Starts for Kumao_87:

(13, 55096), (20, 55132), (31, 55183), (35, 55207), (Start: 47 @55246 has 1 MA's), (65, 55372), (78, 55492),

Gene: Kwadwo_83 Start: 62867, Stop: 62565, Start Num: 43

Candidate Starts for Kwadwo_83:

(Start: 23 @62948 has 34 MA's), (Start: 43 @62867 has 230 MA's), (55, 62798), (61, 62750), (64, 62729), (72, 62690),

Gene: Kwksand96_85 Start: 63133, Stop: 62831, Start Num: 43

Candidate Starts for Kwksand96_85:

(Start: 23 @63214 has 34 MA's), (Start: 43 @63133 has 230 MA's), (55, 63064), (61, 63016), (64, 62995), (72, 62956),

Gene: Labeouficaum_84 Start: 62946, Stop: 62644, Start Num: 43

Candidate Starts for Labeouficaum_84:

(Start: 23 @63027 has 34 MA's), (Start: 43 @62946 has 230 MA's), (61, 62829), (64, 62808), (72, 62769),

Gene: Lars_71 Start: 59048, Stop: 58746, Start Num: 50

Candidate Starts for Lars_71:

(Start: 50 @59048 has 81 MA's), (57, 58988), (61, 58949), (64, 58928), (68, 58907), (79, 58796), (83, 58775), (84, 58769), (86, 58763),

Gene: LasagnaCat_85 Start: 63248, Stop: 62946, Start Num: 43

Candidate Starts for LasagnaCat_85:

(Start: 23 @63329 has 34 MA's), (Start: 43 @63248 has 230 MA's), (55, 63179), (61, 63131), (64, 63110), (72, 63071),

Gene: Lasso_83 Start: 63108, Stop: 62806, Start Num: 43

Candidate Starts for Lasso_83:

(Start: 23 @63189 has 34 MA's), (Start: 43 @63108 has 230 MA's), (64, 62970), (72, 62931),

Gene: LeeLot_83 Start: 63532, Stop: 63149, Start Num: 23

Candidate Starts for LeeLot_83:

(Start: 23 @63532 has 34 MA's), (Start: 43 @63451 has 230 MA's), (61, 63334), (64, 63313), (72, 63274),

Gene: Lego3393_82 Start: 63569, Stop: 63267, Start Num: 43

Candidate Starts for Lego3393_82:

(Start: 23 @63650 has 34 MA's), (Start: 43 @63569 has 230 MA's), (55, 63500), (61, 63452), (64, 63431), (72, 63392),

Gene: Legolas_85 Start: 63195, Stop: 62893, Start Num: 43

Candidate Starts for Legolas_85:

(Start: 23 @63276 has 34 MA's), (Start: 43 @63195 has 230 MA's), (55, 63126), (61, 63078), (64, 63057), (72, 63018),

Gene: LeiMonet_86 Start: 63329, Stop: 63027, Start Num: 43

Candidate Starts for LeiMonet_86:

(Start: 23 @63410 has 34 MA's), (Start: 43 @63329 has 230 MA's), (61, 63212), (64, 63191), (72, 63152),

Gene: LemonSlice_84 Start: 62854, Stop: 62552, Start Num: 43

Candidate Starts for LemonSlice_84:

(Start: 23 @62935 has 34 MA's), (Start: 43 @62854 has 230 MA's), (64, 62716), (72, 62677),

Gene: LeoJr_199 Start: 136061, Stop: 136414, Start Num: 32

Candidate Starts for LeoJr_199:

(32, 136061), (75, 136334), (87, 136409),

Gene: Lephleur_70 Start: 58910, Stop: 58608, Start Num: 50

Candidate Starts for Lephleur_70:

(Start: 50 @58910 has 81 MA's), (57, 58850), (61, 58811), (64, 58790), (68, 58769), (79, 58658), (83, 58637), (84, 58631), (86, 58625),

Gene: LestyG_78 Start: 60804, Stop: 60475, Start Num: 50

Candidate Starts for LestyG_78:

(Start: 50 @60804 has 81 MA's), (61, 60705), (64, 60684), (68, 60663),

Gene: LilSmirk_70 Start: 58947, Stop: 58645, Start Num: 50

Candidate Starts for LilSmirk_70:

(Start: 50 @58947 has 81 MA's), (57, 58887), (61, 58848), (64, 58827), (68, 58806), (79, 58695), (83, 58674), (84, 58668), (86, 58662),

Gene: LizLemon_70 Start: 59075, Stop: 58773, Start Num: 50

Candidate Starts for LizLemon_70:

(Start: 50 @59075 has 81 MA's), (57, 59015), (61, 58976), (64, 58955), (68, 58934), (79, 58823), (83, 58802), (84, 58796), (86, 58790),

Gene: Longacauda_85 Start: 63348, Stop: 63046, Start Num: 43

Candidate Starts for Longacauda_85:

(Start: 23 @63429 has 34 MA's), (Start: 43 @63348 has 230 MA's), (55, 63279), (61, 63231), (64, 63210), (72, 63171),

Gene: Lopsy_81 Start: 62535, Stop: 62233, Start Num: 43

Candidate Starts for Lopsy_81:

(Start: 23 @62616 has 34 MA's), (Start: 43 @62535 has 230 MA's), (55, 62466), (61, 62418), (64, 62397),

Gene: LostAndPhound_83 Start: 63397, Stop: 63095, Start Num: 43

Candidate Starts for LostAndPhound_83:

(Start: 23 @63478 has 34 MA's), (Start: 43 @63397 has 230 MA's), (61, 63280), (64, 63259), (72, 63220),

Gene: LuckyMarjie_81 Start: 62606, Stop: 62304, Start Num: 43

Candidate Starts for LuckyMarjie_81:

(Start: 23 @62687 has 34 MA's), (Start: 43 @62606 has 230 MA's), (61, 62489), (64, 62468), (72, 62429),

Gene: Lulumae_81 Start: 62668, Stop: 62285, Start Num: 23

Candidate Starts for Lulumae_81:

(Start: 23 @62668 has 34 MA's), (Start: 43 @62587 has 230 MA's), (61, 62470), (64, 62449), (72, 62410),

Gene: Lulwa_81 Start: 62220, Stop: 61918, Start Num: 43

Candidate Starts for Lulwa_81:

(Start: 23 @62301 has 34 MA's), (Start: 43 @62220 has 230 MA's), (61, 62103), (64, 62082), (72, 62043),

Gene: Lumine_85 Start: 63045, Stop: 62743, Start Num: 43

Candidate Starts for Lumine_85:

(Start: 23 @63126 has 34 MA's), (Start: 43 @63045 has 230 MA's), (61, 62928), (64, 62907), (72, 62868),

Gene: MRabcd_84 Start: 63322, Stop: 63020, Start Num: 43

Candidate Starts for MRabcd_84:

(Start: 23 @63403 has 34 MA's), (Start: 43 @63322 has 230 MA's), (61, 63205), (64, 63184), (72, 63145),

Gene: Mag7_82 Start: 62806, Stop: 62504, Start Num: 43

Candidate Starts for Mag7_82:

(Start: 23 @62887 has 34 MA's), (Start: 43 @62806 has 230 MA's), (55, 62737), (61, 62689), (64, 62668), (72, 62629),

Gene: Magic8_83 Start: 63174, Stop: 62872, Start Num: 43

Candidate Starts for Magic8_83:

(Start: 23 @63255 has 34 MA's), (Start: 43 @63174 has 230 MA's), (61, 63057), (64, 63036), (72, 62997),

Gene: Magritte_241 Start: 125100, Stop: 125468, Start Num: 44

Candidate Starts for Magritte_241:

(Start: 44 @125100 has 7 MA's), (46, 125106), (56, 125181), (91, 125451),

Gene: MakoManhole_74 Start: 56700, Stop: 56401, Start Num: 41

Candidate Starts for MakoManhole_74:

(Start: 41 @56700 has 5 MA's), (65, 56568), (69, 56550), (79, 56439),

Gene: Mana_82 Start: 63010, Stop: 62708, Start Num: 43

Candidate Starts for Mana_82:

(Start: 23 @63091 has 34 MA's), (Start: 43 @63010 has 230 MA's), (61, 62893), (64, 62872), (72, 62833),

Gene: Manad_83 Start: 63120, Stop: 62818, Start Num: 43

Candidate Starts for Manad_83:

(Start: 23 @63201 has 34 MA's), (Start: 43 @63120 has 230 MA's), (61, 63003), (64, 62982), (72, 62943),

Gene: Marley1013_81 Start: 62170, Stop: 61841, Start Num: 50

Candidate Starts for Marley1013_81:

(Start: 50 @62170 has 81 MA's), (61, 62071), (64, 62050), (68, 62029),

Gene: Marlia_81 Start: 61703, Stop: 61374, Start Num: 50

Candidate Starts for Marlia_81:

(Start: 50 @61703 has 81 MA's), (61, 61604), (64, 61583), (68, 61562),

Gene: Maru_84 Start: 63458, Stop: 63156, Start Num: 43

Candidate Starts for Maru_84:

(Start: 23 @63539 has 34 MA's), (Start: 43 @63458 has 230 MA's), (61, 63341), (64, 63320), (72, 63281),

Gene: Maskar_85 Start: 63370, Stop: 63068, Start Num: 43

Candidate Starts for Maskar_85:

(Start: 23 @63451 has 34 MA's), (Start: 43 @63370 has 230 MA's), (55, 63301), (61, 63253), (64, 63232), (72, 63193),

Gene: MasterPo_71 Start: 58942, Stop: 58640, Start Num: 50

Candidate Starts for MasterPo_71:

(Start: 50 @58942 has 81 MA's), (57, 58882), (61, 58843), (64, 58822), (68, 58801), (79, 58690), (83, 58669), (84, 58663), (86, 58657),

Gene: Matalotodo_83 Start: 63854, Stop: 63552, Start Num: 43

Candidate Starts for Matalotodo_83:

(Start: 23 @63935 has 34 MA's), (Start: 43 @63854 has 230 MA's), (61, 63737), (64, 63716), (72, 63677),

Gene: Mcshane_83 Start: 62868, Stop: 62566, Start Num: 43

Candidate Starts for Mcshane_83:

(Start: 23 @62949 has 34 MA's), (Start: 43 @62868 has 230 MA's), (61, 62751), (64, 62730), (72, 62691),

Gene: Mecca_84 Start: 63422, Stop: 63120, Start Num: 43

Candidate Starts for Mecca_84:

(Start: 23 @63503 has 34 MA's), (Start: 43 @63422 has 230 MA's), (61, 63305), (64, 63284), (72, 63245),

Gene: Megabear_66 Start: 49066, Stop: 49365, Start Num: 50

Candidate Starts for Megabear_66:

(Start: 50 @49066 has 81 MA's), (61, 49165), (64, 49186), (70, 49216), (74, 49273), (79, 49324), (85, 49354),

Gene: Megamind20_84 Start: 62832, Stop: 62530, Start Num: 43

Candidate Starts for Megamind20_84:

(Start: 23 @62913 has 34 MA's), (Start: 43 @62832 has 230 MA's), (55, 62763), (61, 62715), (64, 62694), (72, 62655),

Gene: Megatron_85 Start: 63540, Stop: 63238, Start Num: 43

Candidate Starts for Megatron_85:

(Start: 23 @63621 has 34 MA's), (Start: 43 @63540 has 230 MA's), (55, 63471), (61, 63423), (64, 63402), (72, 63363),

Gene: Melc17_81 Start: 63490, Stop: 63188, Start Num: 43

Candidate Starts for Melc17_81:

(Start: 23 @63571 has 34 MA's), (Start: 43 @63490 has 230 MA's), (61, 63373), (64, 63352), (72, 63313),

Gene: MelsMeow_83 Start: 63130, Stop: 62828, Start Num: 43

Candidate Starts for MelsMeow_83:

(Start: 23 @63211 has 34 MA's), (Start: 43 @63130 has 230 MA's), (55, 63061), (61, 63013), (64, 62992), (72, 62953),

Gene: Mesh1_85 Start: 63667, Stop: 63284, Start Num: 23

Candidate Starts for Mesh1_85:

(Start: 23 @63667 has 34 MA's), (Start: 43 @63586 has 230 MA's), (61, 63469), (64, 63448), (72, 63409),

Gene: Mesmerelda_85 Start: 63422, Stop: 63120, Start Num: 43

Candidate Starts for Mesmerelda_85:

(Start: 23 @63503 has 34 MA's), (Start: 43 @63422 has 230 MA's), (61, 63305), (64, 63284), (72, 63245),

Gene: MichaelPhcott_82 Start: 62803, Stop: 62501, Start Num: 43

Candidate Starts for MichaelPhcott_82:

(Start: 23 @62884 has 34 MA's), (Start: 43 @62803 has 230 MA's), (55, 62734), (61, 62686), (64, 62665), (72, 62626),

Gene: Mikota_81 Start: 62574, Stop: 62272, Start Num: 43
Candidate Starts for Mikota_81:
(Start: 23 @62655 has 34 MA's), (Start: 43 @62574 has 230 MA's), (61, 62457), (64, 62436), (72, 62397),

Gene: Mimi_197 Start: 137277, Stop: 137567, Start Num: 44
Candidate Starts for Mimi_197:
(33, 137241), (Start: 44 @137277 has 7 MA's), (63, 137394), (75, 137496),

Gene: MiniBoss_81 Start: 62175, Stop: 61873, Start Num: 43
Candidate Starts for MiniBoss_81:
(Start: 23 @62256 has 34 MA's), (Start: 43 @62175 has 230 MA's), (61, 62058), (64, 62037), (72, 61998),

Gene: MitKao_84 Start: 63024, Stop: 62722, Start Num: 43
Candidate Starts for MitKao_84:
(Start: 23 @63105 has 34 MA's), (Start: 43 @63024 has 230 MA's), (61, 62907), (64, 62886), (72, 62847),

Gene: MmasiCarm_81 Start: 61673, Stop: 61344, Start Num: 50
Candidate Starts for MmasiCarm_81:
(Start: 50 @61673 has 81 MA's), (61, 61574), (64, 61553), (68, 61532),

Gene: Morgushi_82 Start: 62919, Stop: 62536, Start Num: 23
Candidate Starts for Morgushi_82:
(Start: 23 @62919 has 34 MA's), (Start: 43 @62838 has 230 MA's), (61, 62721), (64, 62700), (72, 62661),

Gene: Morrissey_45 Start: 34634, Stop: 34356, Start Num: 44
Candidate Starts for Morrissey_45:
(Start: 44 @34634 has 7 MA's), (57, 34559), (61, 34532), (62, 34529), (65, 34508), (67, 34499), (69, 34490), (75, 34421),

Gene: Mortcellus_80 Start: 62399, Stop: 62070, Start Num: 50
Candidate Starts for Mortcellus_80:
(Start: 50 @62399 has 81 MA's), (61, 62300), (64, 62279), (68, 62258),

Gene: Morty_85 Start: 63410, Stop: 63108, Start Num: 43
Candidate Starts for Morty_85:
(Start: 23 @63491 has 34 MA's), (Start: 43 @63410 has 230 MA's), (61, 63293), (64, 63272), (72, 63233),

Gene: Morty007_79 Start: 62170, Stop: 61841, Start Num: 50
Candidate Starts for Morty007_79:
(Start: 50 @62170 has 81 MA's), (61, 62071), (64, 62050), (68, 62029),

Gene: Mosaic_82 Start: 63101, Stop: 62718, Start Num: 23
Candidate Starts for Mosaic_82:
(Start: 23 @63101 has 34 MA's), (Start: 43 @63020 has 230 MA's), (61, 62903), (64, 62882), (72, 62843),

Gene: MossRose_77 Start: 57611, Stop: 57312, Start Num: 41
Candidate Starts for MossRose_77:

(Start: 41 @57611 has 5 MA's), (65, 57479), (69, 57461), (79, 57350),

Gene: MrPhizzler_83 Start: 63318, Stop: 63016, Start Num: 43

Candidate Starts for MrPhizzler_83:

(Start: 23 @63399 has 34 MA's), (Start: 43 @63318 has 230 MA's), (61, 63201), (64, 63180), (72, 63141),

Gene: Mulan_83 Start: 63053, Stop: 62751, Start Num: 43

Candidate Starts for Mulan_83:

(Start: 23 @63134 has 34 MA's), (Start: 43 @63053 has 230 MA's), (61, 62936), (64, 62915), (72, 62876),

Gene: Murdoc_81 Start: 63212, Stop: 62829, Start Num: 23

Candidate Starts for Murdoc_81:

(Start: 23 @63212 has 34 MA's), (Start: 43 @63131 has 230 MA's), (61, 63014), (64, 62993), (72, 62954),

Gene: Mutante_85 Start: 63025, Stop: 62723, Start Num: 43

Candidate Starts for Mutante_85:

(Start: 23 @63106 has 34 MA's), (Start: 43 @63025 has 230 MA's), (61, 62908), (64, 62887), (72, 62848),

Gene: Nacho_0087 Start: 64177, Stop: 63794, Start Num: 23

Candidate Starts for Nacho_0087:

(Start: 23 @64177 has 34 MA's), (Start: 43 @64096 has 230 MA's), (61, 63979), (64, 63958), (72, 63919),

Gene: Nathan_85 Start: 63551, Stop: 63249, Start Num: 43

Candidate Starts for Nathan_85:

(Start: 23 @63632 has 34 MA's), (Start: 43 @63551 has 230 MA's), (61, 63434), (64, 63413), (72, 63374),

Gene: Neos5_80 Start: 61632, Stop: 61303, Start Num: 50

Candidate Starts for Neos5_80:

(Start: 50 @61632 has 81 MA's), (61, 61533), (64, 61512), (68, 61491),

Gene: Newman_82 Start: 63454, Stop: 63071, Start Num: 23

Candidate Starts for Newman_82:

(Start: 23 @63454 has 34 MA's), (Start: 43 @63373 has 230 MA's), (61, 63256), (64, 63235), (72, 63196),

Gene: Nicole21_85 Start: 63159, Stop: 62857, Start Num: 43

Candidate Starts for Nicole21_85:

(Start: 23 @63240 has 34 MA's), (Start: 43 @63159 has 230 MA's), (55, 63090), (61, 63042), (64, 63021), (72, 62982),

Gene: Nozo_80 Start: 62041, Stop: 61712, Start Num: 50

Candidate Starts for Nozo_80:

(Start: 50 @62041 has 81 MA's), (61, 61942), (64, 61921), (68, 61900),

Gene: Numberten_83 Start: 63140, Stop: 62838, Start Num: 43

Candidate Starts for Numberten_83:

(Start: 23 @63221 has 34 MA's), (Start: 43 @63140 has 230 MA's), (61, 63023), (64, 63002), (72, 62963),

Gene: Nyala_83 Start: 62875, Stop: 62573, Start Num: 43

Candidate Starts for Nyala_83:

(Start: 23 @62956 has 34 MA's), (Start: 43 @62875 has 230 MA's), (61, 62758), (64, 62737), (72, 62698),

Gene: OSmaximus_85 Start: 63706, Stop: 63404, Start Num: 43

Candidate Starts for OSmaximus_85:

(Start: 23 @63787 has 34 MA's), (Start: 43 @63706 has 230 MA's), (64, 63568), (72, 63529),

Gene: Obutu_82 Start: 61844, Stop: 61515, Start Num: 50

Candidate Starts for Obutu_82:

(Start: 50 @61844 has 81 MA's), (61, 61745), (64, 61724), (68, 61703),

Gene: Olak_83 Start: 63039, Stop: 62737, Start Num: 43

Candidate Starts for Olak_83:

(Start: 23 @63120 has 34 MA's), (Start: 43 @63039 has 230 MA's), (64, 62901), (72, 62862),

Gene: Oline_83 Start: 63029, Stop: 62727, Start Num: 43

Candidate Starts for Oline_83:

(Start: 23 @63110 has 34 MA's), (Start: 43 @63029 has 230 MA's), (61, 62912), (64, 62891), (72, 62852),

Gene: Olive_82 Start: 63270, Stop: 62968, Start Num: 43

Candidate Starts for Olive_82:

(Start: 23 @63351 has 34 MA's), (Start: 43 @63270 has 230 MA's), (61, 63153), (64, 63132), (72, 63093),

Gene: OliverWalter_84 Start: 63326, Stop: 63024, Start Num: 43

Candidate Starts for OliverWalter_84:

(Start: 23 @63407 has 34 MA's), (Start: 43 @63326 has 230 MA's), (61, 63209), (64, 63188), (72, 63149),

Gene: Omniscient_85 Start: 63729, Stop: 63427, Start Num: 43

Candidate Starts for Omniscient_85:

(Start: 23 @63810 has 34 MA's), (Start: 43 @63729 has 230 MA's), (55, 63660), (61, 63612), (64, 63591), (72, 63552),

Gene: Oosterbaan_84 Start: 63266, Stop: 62964, Start Num: 43

Candidate Starts for Oosterbaan_84:

(Start: 23 @63347 has 34 MA's), (Start: 43 @63266 has 230 MA's), (61, 63149), (64, 63128), (72, 63089),

Gene: Opia_71 Start: 58968, Stop: 58666, Start Num: 50

Candidate Starts for Opia_71:

(Start: 50 @58968 has 81 MA's), (57, 58908), (61, 58869), (64, 58848), (68, 58827), (79, 58716), (83, 58695), (84, 58689), (86, 58683),

Gene: Orfeu_83 Start: 63388, Stop: 63086, Start Num: 43

Candidate Starts for Orfeu_83:

(Start: 23 @63469 has 34 MA's), (Start: 43 @63388 has 230 MA's), (61, 63271), (64, 63250), (72, 63211),

Gene: Orion_83 Start: 63039, Stop: 62656, Start Num: 23

Candidate Starts for Orion_83:

(Start: 23 @63039 has 34 MA's), (Start: 43 @62958 has 230 MA's), (61, 62841), (64, 62820), (72, 62781),

Gene: Orwigg_83 Start: 62794, Stop: 62492, Start Num: 43

Candidate Starts for Orwigg_83:

(Start: 23 @62875 has 34 MA's), (Start: 43 @62794 has 230 MA's), (61, 62677), (64, 62656), (72, 62617),

Gene: PG1_83 Start: 63611, Stop: 63228, Start Num: 23

Candidate Starts for PG1_83:

(Start: 23 @63611 has 34 MA's), (Start: 43 @63530 has 230 MA's), (61, 63413), (64, 63392), (72, 63353),

Gene: PR_67 Start: 49757, Stop: 50056, Start Num: 50

Candidate Starts for PR_67:

(Start: 50 @49757 has 81 MA's), (61, 49856), (64, 49877), (70, 49907), (74, 49964), (79, 50015), (85, 50045),

Gene: Pacifista_83 Start: 62879, Stop: 62577, Start Num: 43

Candidate Starts for Pacifista_83:

(Start: 23 @62960 has 34 MA's), (Start: 43 @62879 has 230 MA's), (61, 62762), (64, 62741), (72, 62702),

Gene: Parvarticeps_13 Start: 8726, Stop: 9028, Start Num: 42

Candidate Starts for Parvarticeps_13:

(1, 7829), (2, 8093), (5, 8369), (15, 8615), (19, 8627), (42, 8726), (56, 8810), (66, 8870), (80, 9002),

Gene: Patbob_197 Start: 137664, Stop: 137954, Start Num: 44

Candidate Starts for Patbob_197:

(33, 137628), (Start: 44 @137664 has 7 MA's), (75, 137883),

Gene: Phaedrus_75 Start: 60692, Stop: 60363, Start Num: 50

Candidate Starts for Phaedrus_75:

(Start: 50 @60692 has 81 MA's), (61, 60593), (64, 60572), (68, 60551),

Gene: Phamished_84 Start: 63046, Stop: 62744, Start Num: 43

Candidate Starts for Phamished_84:

(Start: 23 @63127 has 34 MA's), (Start: 43 @63046 has 230 MA's), (61, 62929), (64, 62908), (72, 62869),

Gene: Phantasmagoria_69 Start: 58957, Stop: 58655, Start Num: 50

Candidate Starts for Phantasmagoria_69:

(Start: 50 @58957 has 81 MA's), (61, 58858), (64, 58837), (68, 58816), (79, 58705), (83, 58684), (84, 58678), (86, 58672),

Gene: Phareon_82 Start: 62571, Stop: 62269, Start Num: 43

Candidate Starts for Phareon_82:

(Start: 23 @62652 has 34 MA's), (Start: 43 @62571 has 230 MA's), (61, 62454), (64, 62433), (72, 62394),

Gene: PhatCats2014_84 Start: 63611, Stop: 63228, Start Num: 23

Candidate Starts for PhatCats2014_84:

(Start: 23 @63611 has 34 MA's), (Start: 43 @63530 has 230 MA's), (55, 63461), (61, 63413), (64, 63392), (72, 63353),

Gene: PhatLouie_86 Start: 63405, Stop: 63103, Start Num: 43

Candidate Starts for PhatLouie_86:

(Start: 23 @63486 has 34 MA's), (Start: 43 @63405 has 230 MA's), (61, 63288), (64, 63267), (72, 63228),

Gene: Phayeta_83 Start: 61761, Stop: 61432, Start Num: 50

Candidate Starts for Phayeta_83:

(Start: 50 @61761 has 81 MA's), (61, 61662), (64, 61641), (68, 61620),

Gene: PhenghisKhan_84 Start: 63035, Stop: 62733, Start Num: 43

Candidate Starts for PhenghisKhan_84:

(Start: 23 @63116 has 34 MA's), (Start: 43 @63035 has 230 MA's), (55, 62966), (61, 62918), (64, 62897), (72, 62858),

Gene: Pherdinand_85 Start: 63251, Stop: 62949, Start Num: 43

Candidate Starts for Pherdinand_85:

(Start: 23 @63332 has 34 MA's), (Start: 43 @63251 has 230 MA's), (55, 63182), (61, 63134), (64, 63113), (72, 63074),

Gene: Phergie_84 Start: 63024, Stop: 62722, Start Num: 43

Candidate Starts for Phergie_84:

(Start: 23 @63105 has 34 MA's), (Start: 43 @63024 has 230 MA's), (55, 62955), (61, 62907), (64, 62886), (72, 62847),

Gene: Philly_79 Start: 61124, Stop: 60795, Start Num: 50

Candidate Starts for Philly_79:

(Start: 50 @61124 has 81 MA's), (61, 61025), (64, 61004), (68, 60983),

Gene: Phipps_83 Start: 63102, Stop: 62800, Start Num: 43

Candidate Starts for Phipps_83:

(Start: 23 @63183 has 34 MA's), (Start: 43 @63102 has 230 MA's), (61, 62985), (64, 62964), (72, 62925),

Gene: Phleuron_82 Start: 62836, Stop: 62534, Start Num: 43

Candidate Starts for Phleuron_82:

(Start: 23 @62917 has 34 MA's), (Start: 43 @62836 has 230 MA's), (55, 62767), (61, 62719), (64, 62698), (72, 62659),

Gene: Phlyer_80 Start: 61987, Stop: 61658, Start Num: 50

Candidate Starts for Phlyer_80:

(Start: 50 @61987 has 81 MA's), (61, 61888), (64, 61867), (68, 61846),

Gene: Phrampa_191 Start: 137032, Stop: 137322, Start Num: 44

Candidate Starts for Phrampa_191:

(33, 136996), (Start: 44 @137032 has 7 MA's), (75, 137251),

Gene: PhrankReynolds_83 Start: 63110, Stop: 62727, Start Num: 23
Candidate Starts for PhrankReynolds_83:
(Start: 23 @63110 has 34 MA's), (Start: 43 @63029 has 230 MA's), (55, 62960), (61, 62912), (64, 62891), (72, 62852),

Gene: PhrodoBaggins_86 Start: 63405, Stop: 63103, Start Num: 43
Candidate Starts for PhrodoBaggins_86:
(Start: 23 @63486 has 34 MA's), (Start: 43 @63405 has 230 MA's), (61, 63288), (64, 63267), (72, 63228),

Gene: Phunky_82 Start: 62909, Stop: 62607, Start Num: 43
Candidate Starts for Phunky_82:
(Start: 23 @62990 has 34 MA's), (Start: 43 @62909 has 230 MA's), (64, 62771), (72, 62732),

Gene: Piglet_0084 Start: 63524, Stop: 63222, Start Num: 43
Candidate Starts for Piglet_0084:
(Start: 23 @63605 has 34 MA's), (Start: 43 @63524 has 230 MA's), (61, 63407), (64, 63386), (72, 63347),

Gene: PinheadLarry_83 Start: 63175, Stop: 62873, Start Num: 43
Candidate Starts for PinheadLarry_83:
(Start: 23 @63256 has 34 MA's), (Start: 43 @63175 has 230 MA's), (64, 63037), (72, 62998),

Gene: Pinkman_84 Start: 63248, Stop: 62946, Start Num: 43
Candidate Starts for Pinkman_84:
(Start: 23 @63329 has 34 MA's), (Start: 43 @63248 has 230 MA's), (61, 63131), (64, 63110), (72, 63071),

Gene: Pipefish_82 Start: 62383, Stop: 62054, Start Num: 50
Candidate Starts for Pipefish_82:
(Start: 50 @62383 has 81 MA's), (61, 62284), (64, 62263), (68, 62242),

Gene: Pipsqueak_81 Start: 62861, Stop: 62559, Start Num: 43
Candidate Starts for Pipsqueak_81:
(Start: 23 @62942 has 34 MA's), (Start: 43 @62861 has 230 MA's), (61, 62744), (64, 62723), (72, 62684),

Gene: Placalicious_83 Start: 63894, Stop: 63592, Start Num: 43
Candidate Starts for Placalicious_83:
(Start: 23 @63975 has 34 MA's), (Start: 43 @63894 has 230 MA's), (61, 63777), (64, 63756), (72, 63717),

Gene: Plata_83 Start: 63116, Stop: 62775, Start Num: 43
Candidate Starts for Plata_83:
(Start: 23 @63197 has 34 MA's), (Start: 43 @63116 has 230 MA's), (61, 62999), (64, 62978), (72, 62939), (90, 62789),

Gene: Plmatters_82 Start: 62849, Stop: 62547, Start Num: 43
Candidate Starts for Plmatters_82:
(Start: 23 @62930 has 34 MA's), (Start: 43 @62849 has 230 MA's), (61, 62732), (64, 62711), (72, 62672),

Gene: Podrick_83 Start: 62937, Stop: 62635, Start Num: 43

Candidate Starts for Podrick_83:

(Start: 23 @63018 has 34 MA's), (Start: 43 @62937 has 230 MA's), (61, 62820), (64, 62799), (72, 62760),

Gene: Pops_82 Start: 63120, Stop: 62737, Start Num: 23

Candidate Starts for Pops_82:

(Start: 23 @63120 has 34 MA's), (Start: 43 @63039 has 230 MA's), (61, 62922), (64, 62901), (72, 62862),

Gene: Potter_80 Start: 62858, Stop: 62556, Start Num: 43

Candidate Starts for Potter_80:

(Start: 23 @62939 has 34 MA's), (Start: 43 @62858 has 230 MA's), (61, 62741), (64, 62720), (72, 62681),

Gene: Prickles_85 Start: 63228, Stop: 62926, Start Num: 43

Candidate Starts for Prickles_85:

(Start: 23 @63309 has 34 MA's), (Start: 43 @63228 has 230 MA's), (64, 63090), (72, 63051),

Gene: PrinceCharming_71 Start: 58997, Stop: 58695, Start Num: 50

Candidate Starts for PrinceCharming_71:

(Start: 50 @58997 has 81 MA's), (57, 58937), (61, 58898), (64, 58877), (68, 58856), (79, 58745), (83, 58724), (84, 58718), (86, 58712),

Gene: ProfessorX_82 Start: 62895, Stop: 62593, Start Num: 43

Candidate Starts for ProfessorX_82:

(Start: 23 @62976 has 34 MA's), (Start: 43 @62895 has 230 MA's), (61, 62778), (64, 62757), (72, 62718),

Gene: Puhltonio_81 Start: 63213, Stop: 62830, Start Num: 23

Candidate Starts for Puhltonio_81:

(Start: 23 @63213 has 34 MA's), (Start: 43 @63132 has 230 MA's), (61, 63015), (64, 62994), (72, 62955),

Gene: Puppies_40 Start: 32033, Stop: 31737, Start Num: 44

Candidate Starts for Puppies_40:

(9, 32213), (10, 32204), (25, 32105), (Start: 44 @32033 has 7 MA's), (57, 31949), (67, 31889), (75, 31811),

Gene: QueenBeane_84 Start: 63182, Stop: 62880, Start Num: 43

Candidate Starts for QueenBeane_84:

(Start: 23 @63263 has 34 MA's), (Start: 43 @63182 has 230 MA's), (55, 63113), (61, 63065), (64, 63044), (72, 63005),

Gene: Quisquilliae_86 Start: 63192, Stop: 62890, Start Num: 43

Candidate Starts for Quisquilliae_86:

(Start: 23 @63273 has 34 MA's), (Start: 43 @63192 has 230 MA's), (61, 63075), (64, 63054), (72, 63015),

Gene: Racecar_198 Start: 137389, Stop: 137679, Start Num: 44

Candidate Starts for Racecar_198:

(33, 137353), (Start: 44 @137389 has 7 MA's), (63, 137506), (75, 137608),

Gene: RagingRooster_79 Start: 60967, Stop: 60638, Start Num: 50
Candidate Starts for RagingRooster_79:
(Start: 50 @60967 has 81 MA's), (61, 60868), (64, 60847), (68, 60826),

Gene: RedMaple_84 Start: 63795, Stop: 63493, Start Num: 43
Candidate Starts for RedMaple_84:
(Start: 23 @63876 has 34 MA's), (Start: 43 @63795 has 230 MA's), (61, 63678), (64, 63657), (72, 63618),

Gene: ReginaGlobina_203 Start: 137344, Stop: 137697, Start Num: 32
Candidate Starts for ReginaGlobina_203:
(32, 137344), (75, 137617), (87, 137692),

Gene: Rhinoforte_70 Start: 58995, Stop: 58693, Start Num: 50
Candidate Starts for Rhinoforte_70:
(Start: 50 @58995 has 81 MA's), (57, 58935), (61, 58896), (64, 58875), (68, 58854), (79, 58743), (83, 58722), (84, 58716), (86, 58710),

Gene: Ricotta_84 Start: 62877, Stop: 62575, Start Num: 43
Candidate Starts for Ricotta_84:
(Start: 23 @62958 has 34 MA's), (Start: 43 @62877 has 230 MA's), (61, 62760), (64, 62739), (72, 62700),

Gene: Riggan_85 Start: 63363, Stop: 63061, Start Num: 43
Candidate Starts for Riggan_85:
(Start: 23 @63444 has 34 MA's), (Start: 43 @63363 has 230 MA's), (55, 63294), (61, 63246), (64, 63225), (72, 63186),

Gene: Rimu_88 Start: 63341, Stop: 63039, Start Num: 43
Candidate Starts for Rimu_88:
(Start: 23 @63422 has 34 MA's), (Start: 43 @63341 has 230 MA's), (61, 63224), (64, 63203), (72, 63164),

Gene: Rita1961_81 Start: 61621, Stop: 61292, Start Num: 50
Candidate Starts for Rita1961_81:
(Start: 50 @61621 has 81 MA's), (61, 61522), (64, 61501), (68, 61480),

Gene: Riverton_83 Start: 63121, Stop: 62819, Start Num: 43
Candidate Starts for Riverton_83:
(Start: 23 @63202 has 34 MA's), (Start: 43 @63121 has 230 MA's), (61, 63004), (64, 62983), (72, 62944),

Gene: Robyn_86 Start: 63620, Stop: 63318, Start Num: 43
Candidate Starts for Robyn_86:
(Start: 23 @63701 has 34 MA's), (Start: 43 @63620 has 230 MA's), (61, 63503), (64, 63482), (72, 63443),

Gene: Roliet_81 Start: 62222, Stop: 61920, Start Num: 43
Candidate Starts for Roliet_81:
(Start: 23 @62303 has 34 MA's), (Start: 43 @62222 has 230 MA's), (61, 62105), (64, 62084), (72, 62045),

Gene: RomaT_80 Start: 61841, Stop: 61512, Start Num: 50

Candidate Starts for RomaT_80:

(Start: 50 @61841 has 81 MA's), (61, 61742), (64, 61721), (68, 61700),

Gene: Roscoe_84 Start: 63482, Stop: 63180, Start Num: 43

Candidate Starts for Roscoe_84:

(Start: 23 @63563 has 34 MA's), (Start: 43 @63482 has 230 MA's), (61, 63365), (64, 63344), (72, 63305),

Gene: Rosebush_69 Start: 59062, Stop: 58760, Start Num: 50

Candidate Starts for Rosebush_69:

(Start: 50 @59062 has 81 MA's), (57, 59002), (61, 58963), (64, 58942), (68, 58921), (79, 58810), (83, 58789), (84, 58783), (86, 58777),

Gene: Roy17_82 Start: 62668, Stop: 62285, Start Num: 23

Candidate Starts for Roy17_82:

(Start: 23 @62668 has 34 MA's), (Start: 43 @62587 has 230 MA's), (61, 62470), (64, 62449), (72, 62410),

Gene: SDcharge11_83 Start: 62515, Stop: 62213, Start Num: 43

Candidate Starts for SDcharge11_83:

(Start: 23 @62596 has 34 MA's), (Start: 43 @62515 has 230 MA's), (61, 62398), (64, 62377), (72, 62338),

Gene: Sabella_70 Start: 58897, Stop: 58595, Start Num: 50

Candidate Starts for Sabella_70:

(Start: 50 @58897 has 81 MA's), (61, 58798), (64, 58777), (68, 58756), (79, 58645), (83, 58624), (84, 58618), (86, 58612),

Gene: Samaymay_84 Start: 63182, Stop: 62880, Start Num: 43

Candidate Starts for Samaymay_84:

(Start: 23 @63263 has 34 MA's), (Start: 43 @63182 has 230 MA's), (55, 63113), (61, 63065), (64, 63044), (72, 63005),

Gene: SassyCat97_82 Start: 62849, Stop: 62547, Start Num: 43

Candidate Starts for SassyCat97_82:

(Start: 23 @62930 has 34 MA's), (Start: 43 @62849 has 230 MA's), (61, 62732), (64, 62711), (72, 62672),

Gene: Schadenfreude_84 Start: 62740, Stop: 62438, Start Num: 43

Candidate Starts for Schadenfreude_84:

(Start: 23 @62821 has 34 MA's), (Start: 43 @62740 has 230 MA's), (61, 62623), (64, 62602), (72, 62563),

Gene: Schueller_82 Start: 63123, Stop: 62821, Start Num: 43

Candidate Starts for Schueller_82:

(Start: 23 @63204 has 34 MA's), (Start: 43 @63123 has 230 MA's), (55, 63054), (61, 63006), (64, 62985), (72, 62946),

Gene: Scoot17C_85 Start: 62962, Stop: 62660, Start Num: 43

Candidate Starts for Scoot17C_85:

(Start: 23 @63043 has 34 MA's), (Start: 43 @62962 has 230 MA's), (61, 62845), (64, 62824), (72, 62785),

Gene: Scrick_83 Start: 62863, Stop: 62561, Start Num: 43

Candidate Starts for Scrick_83:

(Start: 23 @62944 has 34 MA's), (Start: 43 @62863 has 230 MA's), (61, 62746), (64, 62725), (72, 62686),

Gene: Selr12_85 Start: 62905, Stop: 62603, Start Num: 43

Candidate Starts for Selr12_85:

(Start: 23 @62986 has 34 MA's), (Start: 43 @62905 has 230 MA's), (61, 62788), (64, 62767), (72, 62728),

Gene: Serendipity_84 Start: 63416, Stop: 63033, Start Num: 23

Candidate Starts for Serendipity_84:

(Start: 23 @63416 has 34 MA's), (Start: 43 @63335 has 230 MA's), (61, 63218), (64, 63197), (72, 63158),

Gene: Serpentine_0085 Start: 63416, Stop: 63114, Start Num: 43

Candidate Starts for Serpentine_0085:

(Start: 23 @63497 has 34 MA's), (Start: 43 @63416 has 230 MA's), (61, 63299), (64, 63278), (72, 63239),

Gene: Sheila_80 Start: 62428, Stop: 62126, Start Num: 43

Candidate Starts for Sheila_80:

(Start: 23 @62509 has 34 MA's), (Start: 43 @62428 has 230 MA's), (61, 62311), (64, 62290), (72, 62251),

Gene: Shenandoah_79 Start: 60887, Stop: 60558, Start Num: 50

Candidate Starts for Shenandoah_79:

(Start: 50 @60887 has 81 MA's), (61, 60788), (64, 60767), (68, 60746),

Gene: ShiVal_82 Start: 62887, Stop: 62585, Start Num: 43

Candidate Starts for ShiVal_82:

(Start: 23 @62968 has 34 MA's), (Start: 43 @62887 has 230 MA's), (61, 62770), (64, 62749), (72, 62710),

Gene: Sigman_84 Start: 62924, Stop: 62541, Start Num: 23

Candidate Starts for Sigman_84:

(Start: 23 @62924 has 34 MA's), (Start: 43 @62843 has 230 MA's), (55, 62774), (61, 62726), (64, 62705), (72, 62666),

Gene: SilverBell_85 Start: 63378, Stop: 62995, Start Num: 23

Candidate Starts for SilverBell_85:

(Start: 23 @63378 has 34 MA's), (Start: 43 @63297 has 230 MA's), (55, 63228), (61, 63180), (64, 63159), (72, 63120),

Gene: Simielle_83 Start: 62829, Stop: 62527, Start Num: 43

Candidate Starts for Simielle_83:

(Start: 23 @62910 has 34 MA's), (Start: 43 @62829 has 230 MA's), (61, 62712), (64, 62691), (72, 62652),

Gene: SirBeauregard_85 Start: 63409, Stop: 63107, Start Num: 43

Candidate Starts for SirBeauregard_85:

(Start: 23 @63490 has 34 MA's), (Start: 43 @63409 has 230 MA's), (55, 63340), (61, 63292), (64, 63271), (72, 63232),

Gene: Skippy_85 Start: 63257, Stop: 62955, Start Num: 43
Candidate Starts for Skippy_85:
(Start: 23 @63338 has 34 MA's), (Start: 43 @63257 has 230 MA's), (61, 63140), (64, 63119), (72, 63080),

Gene: Slatt_84 Start: 63144, Stop: 62842, Start Num: 43
Candidate Starts for Slatt_84:
(Start: 23 @63225 has 34 MA's), (Start: 43 @63144 has 230 MA's), (61, 63027), (64, 63006), (72, 62967),

Gene: SlippinJimmy_83 Start: 62651, Stop: 62322, Start Num: 50
Candidate Starts for SlippinJimmy_83:
(Start: 50 @62651 has 81 MA's), (61, 62552), (64, 62531), (68, 62510),

Gene: Soile_85 Start: 63382, Stop: 63080, Start Num: 43
Candidate Starts for Soile_85:
(Start: 23 @63463 has 34 MA's), (Start: 43 @63382 has 230 MA's), (61, 63265), (64, 63244), (72, 63205),

Gene: Solosis_82 Start: 62850, Stop: 62548, Start Num: 43
Candidate Starts for Solosis_82:
(Start: 23 @62931 has 34 MA's), (Start: 43 @62850 has 230 MA's), (61, 62733), (64, 62712),

Gene: Sophia_82 Start: 62839, Stop: 62537, Start Num: 43
Candidate Starts for Sophia_82:
(Start: 23 @62920 has 34 MA's), (Start: 43 @62839 has 230 MA's), (64, 62701), (72, 62662),

Gene: Soto_81 Start: 62555, Stop: 62253, Start Num: 43
Candidate Starts for Soto_81:
(Start: 23 @62636 has 34 MA's), (Start: 43 @62555 has 230 MA's), (61, 62438), (64, 62417), (72, 62378),

Gene: Spartan300_83 Start: 63100, Stop: 62798, Start Num: 43
Candidate Starts for Spartan300_83:
(Start: 23 @63181 has 34 MA's), (Start: 43 @63100 has 230 MA's), (61, 62983), (64, 62962), (72, 62923),

Gene: Squid_83 Start: 63129, Stop: 62827, Start Num: 43
Candidate Starts for Squid_83:
(Start: 23 @63210 has 34 MA's), (Start: 43 @63129 has 230 MA's), (61, 63012), (64, 62991), (72, 62952),

Gene: Squiggle_83 Start: 62857, Stop: 62555, Start Num: 43
Candidate Starts for Squiggle_83:
(Start: 23 @62938 has 34 MA's), (Start: 43 @62857 has 230 MA's), (61, 62740), (64, 62719), (72, 62680),

Gene: StinkyVeggy_75 Start: 62138, Stop: 61818, Start Num: 45
Candidate Starts for StinkyVeggy_75:
(27, 62207), (29, 62204), (37, 62162), (45, 62138), (61, 62021), (65, 61997), (69, 61979), (71, 61973), (72, 61961), (79, 61871), (88, 61829),

Gene: Struggle_84 Start: 62955, Stop: 62653, Start Num: 43
Candidate Starts for Struggle_84:
(Start: 23 @63036 has 34 MA's), (Start: 43 @62955 has 230 MA's), (61, 62838), (64, 62817), (72, 62778),

Gene: Suffolk_81 Start: 62932, Stop: 62549, Start Num: 23
Candidate Starts for Suffolk_81:
(Start: 23 @62932 has 34 MA's), (Start: 43 @62851 has 230 MA's), (61, 62734), (64, 62713), (72, 62674),

Gene: Surely_84 Start: 63420, Stop: 63118, Start Num: 43
Candidate Starts for Surely_84:
(Start: 23 @63501 has 34 MA's), (Start: 43 @63420 has 230 MA's), (61, 63303), (64, 63282), (72, 63243),

Gene: SwainyDoc_81 Start: 61650, Stop: 61321, Start Num: 50
Candidate Starts for SwainyDoc_81:
(Start: 50 @61650 has 81 MA's), (61, 61551), (64, 61530), (68, 61509),

Gene: Swiphy_88 Start: 63405, Stop: 63103, Start Num: 43
Candidate Starts for Swiphy_88:
(Start: 23 @63486 has 34 MA's), (Start: 43 @63405 has 230 MA's), (61, 63288), (64, 63267), (72, 63228),

Gene: Swish_85 Start: 63266, Stop: 62964, Start Num: 43
Candidate Starts for Swish_85:
(Start: 23 @63347 has 34 MA's), (Start: 43 @63266 has 230 MA's), (61, 63149), (64, 63128), (72, 63089),

Gene: SynergyX_80 Start: 61278, Stop: 60949, Start Num: 50
Candidate Starts for SynergyX_80:
(Start: 50 @61278 has 81 MA's), (61, 61179), (64, 61158), (68, 61137),

Gene: TA17A_73 Start: 58905, Stop: 58603, Start Num: 50
Candidate Starts for TA17A_73:
(Start: 50 @58905 has 81 MA's), (61, 58806), (64, 58785), (68, 58764), (79, 58653), (83, 58632), (84, 58626),

Gene: TPA2_75 Start: 59427, Stop: 59762, Start Num: 40
Candidate Starts for TPA2_75:
(40, 59427), (66, 59565), (69, 59580), (72, 59601), (82, 59709), (89, 59751),

Gene: Talia1610_198 Start: 137685, Stop: 137975, Start Num: 44
Candidate Starts for Talia1610_198:
(33, 137649), (Start: 44 @137685 has 7 MA's), (63, 137802), (75, 137904),

Gene: TallGrassMM_83 Start: 62915, Stop: 62613, Start Num: 43
Candidate Starts for TallGrassMM_83:
(Start: 23 @62996 has 34 MA's), (Start: 43 @62915 has 230 MA's), (61, 62798), (64, 62777),

Gene: Taptic_67 Start: 49153, Stop: 49491, Start Num: 50
Candidate Starts for Taptic_67:

(30, 49072), (Start: 50 @49153 has 81 MA's), (61, 49252), (64, 49273), (70, 49303), (74, 49360), (79, 49411), (88, 49453),

Gene: Telesworld_82 Start: 62993, Stop: 62691, Start Num: 43

Candidate Starts for Telesworld_82:

(Start: 23 @63074 has 34 MA's), (Start: 43 @62993 has 230 MA's), (55, 62924), (61, 62876), (64, 62855), (72, 62816),

Gene: Thonko_87 Start: 63460, Stop: 63152, Start Num: 43

Candidate Starts for Thonko_87:

(3, 63853), (4, 63850), (6, 63805), (7, 63748), (8, 63745), (12, 63604), (14, 63583), (Start: 43 @63460 has 230 MA's), (57, 63382), (61, 63343), (64, 63322), (77, 63226), (81, 63184),

Gene: Thora_83 Start: 63370, Stop: 63068, Start Num: 43

Candidate Starts for Thora_83:

(Start: 23 @63451 has 34 MA's), (Start: 43 @63370 has 230 MA's), (61, 63253), (64, 63232), (72, 63193),

Gene: ThreeOh3D2_86 Start: 63523, Stop: 63221, Start Num: 43

Candidate Starts for ThreeOh3D2_86:

(Start: 23 @63604 has 34 MA's), (Start: 43 @63523 has 230 MA's), (61, 63406), (64, 63385), (72, 63346),

Gene: Thunderbird_84 Start: 63112, Stop: 62810, Start Num: 43

Candidate Starts for Thunderbird_84:

(Start: 23 @63193 has 34 MA's), (Start: 43 @63112 has 230 MA's), (61, 62995), (64, 62974), (72, 62935),

Gene: Timmi_83 Start: 62886, Stop: 62584, Start Num: 43

Candidate Starts for Timmi_83:

(Start: 23 @62967 has 34 MA's), (Start: 43 @62886 has 230 MA's), (61, 62769), (64, 62748), (72, 62709),

Gene: Tinciduntolum_71 Start: 59064, Stop: 58762, Start Num: 50

Candidate Starts for Tinciduntolum_71:

(Start: 50 @59064 has 81 MA's), (57, 59004), (61, 58965), (64, 58944), (68, 58923), (79, 58812), (83, 58791), (84, 58785), (86, 58779),

Gene: TinyTerror_81 Start: 61701, Stop: 61372, Start Num: 50

Candidate Starts for TinyTerror_81:

(Start: 50 @61701 has 81 MA's), (61, 61602), (64, 61581), (68, 61560),

Gene: TomBombadil_84 Start: 63413, Stop: 63111, Start Num: 43

Candidate Starts for TomBombadil_84:

(Start: 23 @63494 has 34 MA's), (Start: 43 @63413 has 230 MA's), (61, 63296), (64, 63275), (72, 63236),

Gene: Tomlarah_85 Start: 63720, Stop: 63418, Start Num: 43

Candidate Starts for Tomlarah_85:

(Start: 43 @63720 has 230 MA's), (55, 63651), (61, 63603), (64, 63582), (72, 63543),

Gene: Toni_84 Start: 63397, Stop: 63014, Start Num: 23

Candidate Starts for Toni_84:

(Start: 23 @63397 has 34 MA's), (Start: 43 @63316 has 230 MA's), (61, 63199), (64, 63178), (72, 63139),

Gene: TooFast2Furius_86 Start: 63277, Stop: 62975, Start Num: 43

Candidate Starts for TooFast2Furius_86:

(Start: 23 @63358 has 34 MA's), (Start: 43 @63277 has 230 MA's), (61, 63160), (64, 63139), (72, 63100),

Gene: Tooj_81 Start: 62529, Stop: 62227, Start Num: 43

Candidate Starts for Tooj_81:

(Start: 23 @62610 has 34 MA's), (Start: 43 @62529 has 230 MA's), (55, 62460), (61, 62412), (64, 62391), (72, 62352),

Gene: Tres_70 Start: 58918, Stop: 58616, Start Num: 50

Candidate Starts for Tres_70:

(Start: 50 @58918 has 81 MA's), (57, 58858), (61, 58819), (64, 58798), (68, 58777), (79, 58666), (83, 58645), (84, 58639), (86, 58633),

Gene: True_82 Start: 62862, Stop: 62560, Start Num: 43

Candidate Starts for True_82:

(Start: 23 @62943 has 34 MA's), (Start: 43 @62862 has 230 MA's), (61, 62745), (64, 62724), (72, 62685),

Gene: Trypo_85 Start: 63665, Stop: 63282, Start Num: 23

Candidate Starts for Trypo_85:

(Start: 23 @63665 has 34 MA's), (Start: 43 @63584 has 230 MA's), (61, 63467), (64, 63446), (72, 63407),

Gene: Tydolla_76 Start: 61257, Stop: 60928, Start Num: 50

Candidate Starts for Tydolla_76:

(Start: 50 @61257 has 81 MA's), (61, 61158), (64, 61137), (68, 61116),

Gene: TyrionL_84 Start: 62946, Stop: 62644, Start Num: 43

Candidate Starts for TyrionL_84:

(Start: 23 @63027 has 34 MA's), (Start: 43 @62946 has 230 MA's), (61, 62829), (64, 62808), (72, 62769),

Gene: UAch1_85 Start: 63213, Stop: 62911, Start Num: 43

Candidate Starts for UAch1_85:

(Start: 23 @63294 has 34 MA's), (Start: 43 @63213 has 230 MA's), (61, 63096), (64, 63075), (72, 63036),

Gene: UncleHowie_81 Start: 62631, Stop: 62248, Start Num: 23

Candidate Starts for UncleHowie_81:

(Start: 23 @62631 has 34 MA's), (Start: 43 @62550 has 230 MA's), (61, 62433), (64, 62412), (72, 62373),

Gene: Upyo_44 Start: 33729, Stop: 33457, Start Num: 48

Candidate Starts for Upyo_44:

(26, 33810), (28, 33807), (34, 33774), (Start: 48 @33729 has 1 MA's), (57, 33657), (61, 33630), (62, 33627), (73, 33558), (75, 33519),

Gene: Usavi_85 Start: 63710, Stop: 63408, Start Num: 43

Candidate Starts for Usavi_85:

(Start: 23 @63791 has 34 MA's), (Start: 43 @63710 has 230 MA's), (61, 63593), (64, 63572), (72, 63533),

Gene: Vaishali24_85 Start: 63319, Stop: 63017, Start Num: 43

Candidate Starts for Vaishali24_85:

(Start: 23 @63400 has 34 MA's), (Start: 43 @63319 has 230 MA's), (61, 63202), (64, 63181), (72, 63142),

Gene: Valjean_83 Start: 63104, Stop: 62802, Start Num: 43

Candidate Starts for Valjean_83:

(Start: 23 @63185 has 34 MA's), (Start: 43 @63104 has 230 MA's), (61, 62987), (64, 62966), (72, 62927),

Gene: Vaticameos_81 Start: 61419, Stop: 61117, Start Num: 43

Candidate Starts for Vaticameos_81:

(Start: 23 @61500 has 34 MA's), (Start: 43 @61419 has 230 MA's), (61, 61302), (64, 61281), (72, 61242),

Gene: Veritas_83 Start: 63027, Stop: 62725, Start Num: 43

Candidate Starts for Veritas_83:

(Start: 23 @63108 has 34 MA's), (Start: 43 @63027 has 230 MA's), (55, 62958), (61, 62910), (64, 62889), (72, 62850),

Gene: Vic9_00070 Start: 59761, Stop: 59459, Start Num: 50

Candidate Starts for Vic9_00070:

(Start: 50 @59761 has 81 MA's), (57, 59701), (61, 59662), (64, 59641), (68, 59620), (79, 59509), (83, 59488), (84, 59482), (86, 59476),

Gene: Virapocalypse_85 Start: 63212, Stop: 62910, Start Num: 43

Candidate Starts for Virapocalypse_85:

(Start: 23 @63293 has 34 MA's), (Start: 43 @63212 has 230 MA's), (61, 63095), (64, 63074), (72, 63035),

Gene: Virgeve_82 Start: 62832, Stop: 62530, Start Num: 43

Candidate Starts for Virgeve_82:

(Start: 23 @62913 has 34 MA's), (Start: 43 @62832 has 230 MA's), (61, 62715), (64, 62694), (72, 62655),

Gene: Vista_83 Start: 63026, Stop: 62724, Start Num: 43

Candidate Starts for Vista_83:

(Start: 23 @63107 has 34 MA's), (Start: 43 @63026 has 230 MA's), (55, 62957), (61, 62909), (64, 62888), (72, 62849),

Gene: Vivaldi_84 Start: 63291, Stop: 62989, Start Num: 43

Candidate Starts for Vivaldi_84:

(Start: 23 @63372 has 34 MA's), (Start: 43 @63291 has 230 MA's), (55, 63222), (61, 63174), (64, 63153), (72, 63114),

Gene: Vortex_83 Start: 63213, Stop: 62830, Start Num: 23

Candidate Starts for Vortex_83:

(Start: 23 @63213 has 34 MA's), (Start: 43 @63132 has 230 MA's), (61, 63015), (64, 62994), (72, 62955),

Gene: WaddleDee_195 Start: 139500, Stop: 139844, Start Num: 32

Candidate Starts for WaddleDee_195:

(32, 139500), (75, 139770),

Gene: Wallhey_85 Start: 63133, Stop: 62831, Start Num: 43

Candidate Starts for Wallhey_85:

(Start: 23 @63214 has 34 MA's), (Start: 43 @63133 has 230 MA's), (61, 63016), (64, 62995), (72, 62956),

Gene: Waterdiva_85 Start: 63400, Stop: 63098, Start Num: 43

Candidate Starts for Waterdiva_85:

(Start: 23 @63481 has 34 MA's), (Start: 43 @63400 has 230 MA's), (61, 63283), (64, 63262), (72, 63223),

Gene: Weher20_81 Start: 63470, Stop: 63168, Start Num: 43

Candidate Starts for Weher20_81:

(Start: 23 @63551 has 34 MA's), (Start: 43 @63470 has 230 MA's), (61, 63353), (64, 63332), (72, 63293),

Gene: West99_70 Start: 59095, Stop: 58793, Start Num: 50

Candidate Starts for West99_70:

(Start: 50 @59095 has 81 MA's), (57, 59035), (61, 58996), (64, 58975), (68, 58954), (79, 58843), (83, 58822), (84, 58816), (86, 58810),

Gene: Windsor_84 Start: 63415, Stop: 63113, Start Num: 43

Candidate Starts for Windsor_84:

(Start: 23 @63496 has 34 MA's), (Start: 43 @63415 has 230 MA's), (61, 63298), (64, 63277), (72, 63238),

Gene: Xavier_84 Start: 63105, Stop: 62722, Start Num: 23

Candidate Starts for Xavier_84:

(Start: 23 @63105 has 34 MA's), (Start: 43 @63024 has 230 MA's), (61, 62907), (64, 62886), (72, 62847),

Gene: Yahalom_78 Start: 61084, Stop: 60755, Start Num: 50

Candidate Starts for Yahalom_78:

(Start: 50 @61084 has 81 MA's), (61, 60985), (64, 60964), (68, 60943),

Gene: Yeshua_79 Start: 57669, Stop: 57370, Start Num: 41

Candidate Starts for Yeshua_79:

(Start: 41 @57669 has 5 MA's), (65, 57537), (69, 57519), (79, 57408),

Gene: Yinz_80 Start: 61149, Stop: 60820, Start Num: 50

Candidate Starts for Yinz_80:

(Start: 50 @61149 has 81 MA's), (61, 61050), (64, 61029), (68, 61008),

Gene: Yoshand_85 Start: 63250, Stop: 62948, Start Num: 43

Candidate Starts for Yoshand_85:

(Start: 23 @63331 has 34 MA's), (Start: 43 @63250 has 230 MA's), (61, 63133), (64, 63112), (72, 63073),

Gene: YouGoGlencoco_84 Start: 63140, Stop: 62838, Start Num: 43

Candidate Starts for YouGoGlencoco_84:

(Start: 23 @63221 has 34 MA's), (Start: 43 @63140 has 230 MA's), (61, 63023), (64, 63002), (72, 62963),

Gene: Zaider_85 Start: 63514, Stop: 63212, Start Num: 43

Candidate Starts for Zaider_85:

(Start: 23 @63595 has 34 MA's), (Start: 43 @63514 has 230 MA's), (61, 63397), (64, 63376), (72, 63337),

Gene: Zelda_84 Start: 63471, Stop: 63169, Start Num: 43

Candidate Starts for Zelda_84:

(Start: 23 @63552 has 34 MA's), (Start: 43 @63471 has 230 MA's), (61, 63354), (64, 63333), (72, 63294),

Gene: Zonia_85 Start: 63662, Stop: 63279, Start Num: 23

Candidate Starts for Zonia_85:

(Start: 23 @63662 has 34 MA's), (Start: 43 @63581 has 230 MA's), (61, 63464), (64, 63443), (72, 63404),

Gene: phiAsp2_75 Start: 57707, Stop: 58057, Start Num: 22

Candidate Starts for phiAsp2_75:

(22, 57707), (49, 57806), (51, 57827), (52, 57833), (53, 57836), (64, 57920), (67, 57932), (69, 57941), (71, 57947),